配置SCA以通过单个AWS S3存储桶接收多个AWS帐户

目录

简介

本文档介绍如何配置Amazon Web Services(AWS)Simple Storage Service(S3)以接受来自第二个AWS帐户的日志。

先决条件

要求

Cisco 建议您了解以下主题：

- 安全云分析
- AWS Identity Access Management(IAM)
- AWS S3

使用的组件

本文档中的信息基于：

- AWS帐户A（称为ACCOUNT_A_ID — 此帐户主机/拥有已存在的S3存储桶）
- AWS账户B(称为ACCOUNT_B_ID — 这是将数据发送到ACCOUNT_A_ID的S3_BUCKET_NAME（安全云分析）的新帐户)
- 安全云分析（必须已与ACCOUNT_A_ID集成）

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原

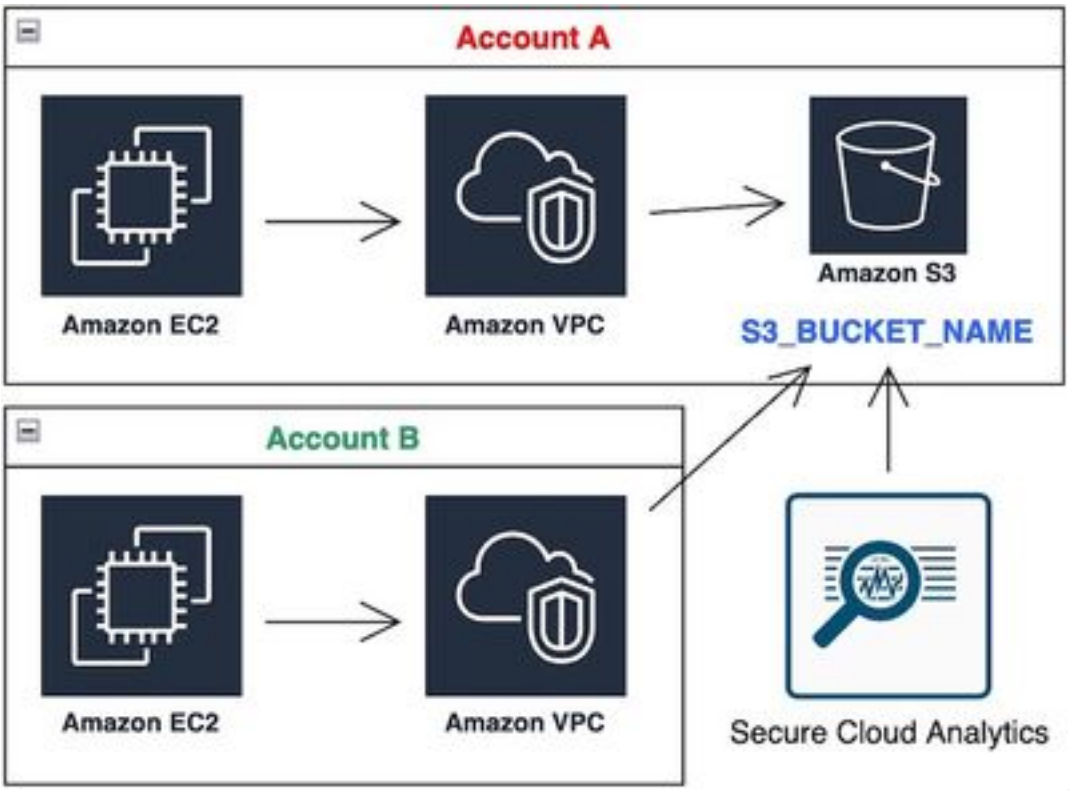
始（默认）配置。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

配置

从1 S3存储桶获取SCA 2+帐户需要五个步骤：

1. Update（更新） **ACCOUNT_A_ID's S3_BUCKET_NAME** 要授予的策略 **ACCOUNT_B_ID** 帐户写入权限。
2. 配置 **ACCOUNT_B_ID** 发送VPC流日志到 **ACCOUNT_A_ID's S3_BUCKET_NAME**.
3. 在中创建IAM策略 **ACCOUNT_B_ID's** AWS IAM控制面板。
4. 在中创建IAM角色 **ACCOUNT_B_ID's** AWS IAM控制面板。
5. 配置安全云分析凭证 **ACCOUNT_B_ID**.

网络图



数据流图

配置

1.更新ACCOUNT_A_ID的S3_BUCKET_NAME策略以授予ACCOUNT_B_ID帐户写入权限

ACCOUNT_A_ID's S3_BUCKET_NAME 此处提供桶策略配置。此配置允许一个辅助（或任何数量的所需帐户）帐户写入(SID-AWSLogDeliveryWrite)S3存储桶，并检查存储桶的ACL(SID - AWSLogDeliveryAclCheck)。

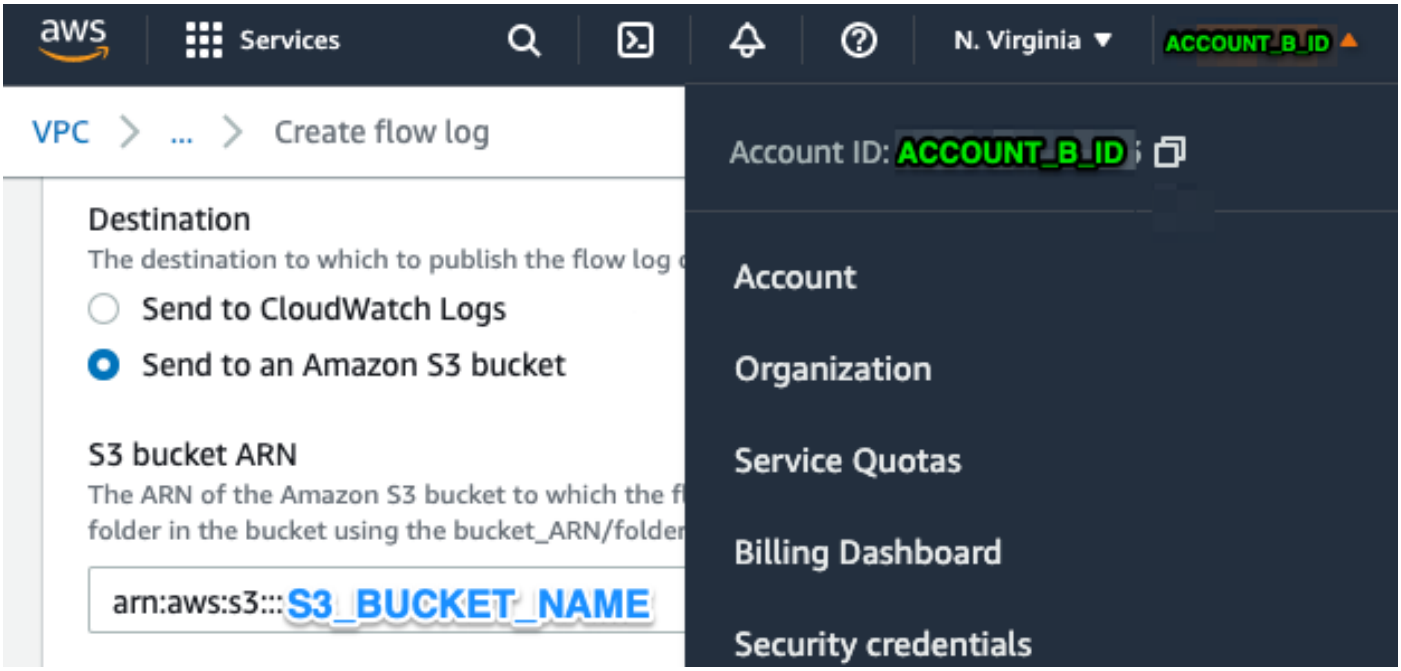
- Change（更改） **ACCOUNT_A_ID** 和 **ACCOUNT_B_ID** 到各自的数字值，不带破折号。
- Change（更改） **S3_BUCKET_NAME** 到相应的桶名称。
- 忽略此处的格式，AWS可以根据需要对其进行编辑。

```
{
"Version": "2012-10-17",
```

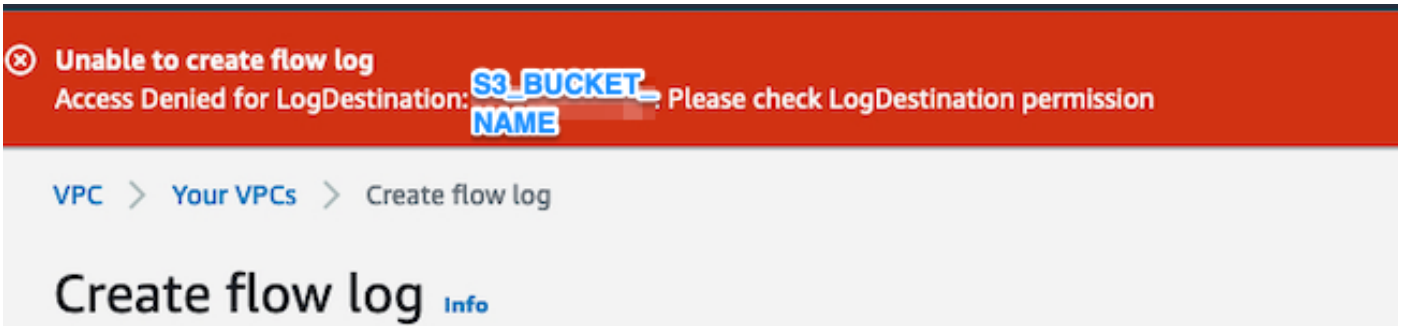
```
"Statement": [
{
"Sid": "AWSLogDeliveryWrite",
"Effect": "Allow",
"Principal": {"Service": "delivery.logs.amazonaws.com"},
"Action": "s3:PutObject",
"Resource": ["arn:aws:s3:::S3_BUCKET_NAME","arn:aws:s3:::S3_BUCKET_NAME/*"],
"Condition": {
"StringEquals": {"aws:SourceAccount": ["ACCOUNT_A_ID","ACCOUNT_B_ID"]},
"ArnLike": {"aws:SourceArn": ["arn:aws:logs:*:ACCOUNT_A_ID:*","arn:aws:logs:*:ACCOUNT_B_ID:*"]}
}
},
{
"Sid": "AWSLogDeliveryAclCheck",
"Effect": "Allow",
"Principal": {
"Service": "delivery.logs.amazonaws.com"
},
"Action": "s3:GetBucketAcl",
"Resource": "arn:aws:s3:::S3_BUCKET_NAME",
"Condition": {
"StringEquals": {"aws:SourceAccount": ["ACCOUNT_A_ID","ACCOUNT_B_ID"]},
"ArnLike": {"aws:SourceArn": ["arn:aws:logs:*:ACCOUNT_A_ID:*","arn:aws:logs:*:ACCOUNT_B_ID:*"]}
}
}
]
}
```

2.配置ACCOUNT_B_ID帐户以将VPC流日志发送到ACCOUNT_A_ID的S3_BUCKET_NAME

创建VPC流日志 **ACCOUNT_B_ID** 具有 **ACCOUNT_A_ID'sS3_BUCKET_NAME** 将ARN存储到目标中，如下图所示：



如果S3存储桶上的权限配置不正确，您会看到类似于此映像的错误：



3.在ACCOUNT_B_ID的AWS IAM控制面板中创建IAM策略

连接到swc_role的IAM策略配置 **ACCOUNT_B_ID** is：

```
swc_single_policy
{
"Version": "2012-10-17",
"Statement": [
{
"Action": [
"autoscaling:Describe*",
"cloudtrail:LookupEvents",
"cloudwatch:Get*",
"cloudwatch:List*",
"ec2:Describe*",
"ecs:List*",
"ecs:Describe*",
"elasticache:Describe*",
"elasticache:List*",
"elasticloadbalancing:Describe*",
"guardduty:Get*",
"guardduty:List*",
"iam:Get*",
"iam:List*",
"inspector:*",
"rds:Describe*",
"rds:List*",
"redshift:Describe*",
"workspaces:Describe*",
"route53:List*"
],
"Effect": "Allow",
"Resource": "*"
},
{
"Action": [
"logs:Describe*",
"logs:GetLogEvents",
"logs:FilterLogEvents",
"logs:PutSubscriptionFilter",
"logs:DeleteSubscriptionFilter"
],
"Effect": "Allow",
"Resource": "*"
},
{
"Sid": "CloudCompliance",
"Action": [
"access-analyzer:ListAnalyzers",
```

```
"cloudtrail:DescribeTrails",
"cloudtrail:GetEventSelectors",
"cloudtrail:GetTrailStatus",
"cloudtrail:ListTags",
"cloudwatch:DescribeAlarmsForMetric",
"config:Get*",
"config:Describe*",
"ec2:GetEbsEncryptionByDefault",
"iam:GenerateCredentialReport",
"iam:Get*",
"iam:List*",
"kms:GetKeyRotationStatus",
"kms:ListKeys",
"logs:DescribeMetricFilters",
"logs:Describe*",
"logs:GetLogEvents",
"logs:FilterLogEvents",
"organizations:ListPolicies",
"s3:GetAccelerateConfiguration",
"s3:GetAccessPoint",
"s3:GetAccessPointPolicy",
"s3:GetAccessPointPolicyStatus",
"s3:GetAccountPublicAccessBlock",
"s3:GetAnalyticsConfiguration",
"s3:GetBucket*",
"s3:GetEncryptionConfiguration",
"s3:GetInventoryConfiguration",
"s3:GetLifecycleConfiguration",
"s3:GetMetricsConfiguration",
"s3:GetObjectAcl",
"s3:GetObjectVersionAcl",
"s3:GetReplicationConfiguration",
"s3:ListAccessPoints",
"s3:ListAllMyBuckets",
"securityhub:Get*",
"sns:ListSubscriptionsByTopic"
],
"Effect": "Allow",
"Resource": "*"
},
{
"Action": [
"s3:ListBucket",
"s3:GetBucketLocation",
"s3:GetObject"
],
"Effect": "Allow",
"Resource": [
"arn:aws:s3:::S3_BUCKET_NAME/*",
"arn:aws:s3:::S3_BUCKET_NAME"
]
}
]
}
```

4.在ACCOUNT_B_ID的AWS IAM控制面板中创建IAM角色

1.选择 **Roles**.

2.选择 **Create role**.

3.选择Another AWS account role type。

4.在“帐户ID”字段中输入757972810156。

5.选择“要求外部ID”选项。

6.输入您的Secure Cloud Analytics Web门户名称作为 **External ID**.
7.单击 **Next: Permissions .**

8.选择 **swc_single_policy** 您刚刚创建的策略。

9.单击 **Next: Tagging**.

10.单击 **Next: Review**.

11.输入swc_role作为角色名称。

12.输入 **Description**，例如允许跨帐户访问的角色。

13.单击 **Create role** .

14.复制角色ARN并将其粘贴到明文编辑器中。

5.为ACCOUNT_B_ID配置安全云分析凭证

1.登录安全云分析并选择 **Settings > Integrations > AWS > Credentials**.

2.单击 **Add New Credentials**.

3.对于 **Name**，建议的命名方案为 **Account_B_ID_creds** (例如;012345678901_creds)对于每个帐户，您希望进行接收。

4.粘贴上一步中的ARN角色并将其粘贴到 **Role ARN** 字段。

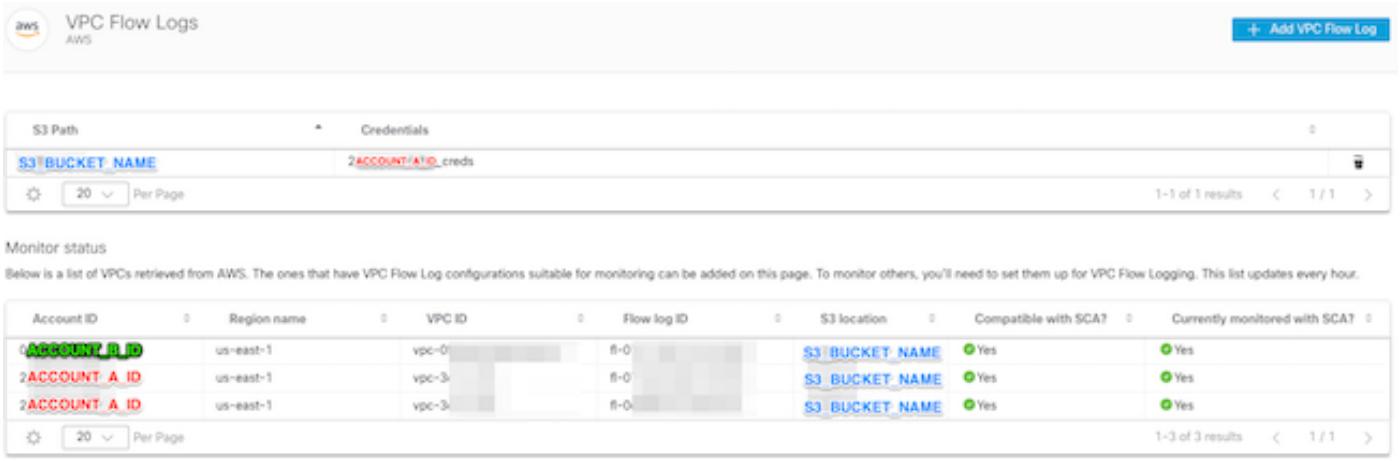
5. 点击 **Create.**

无需进一步配置步骤。

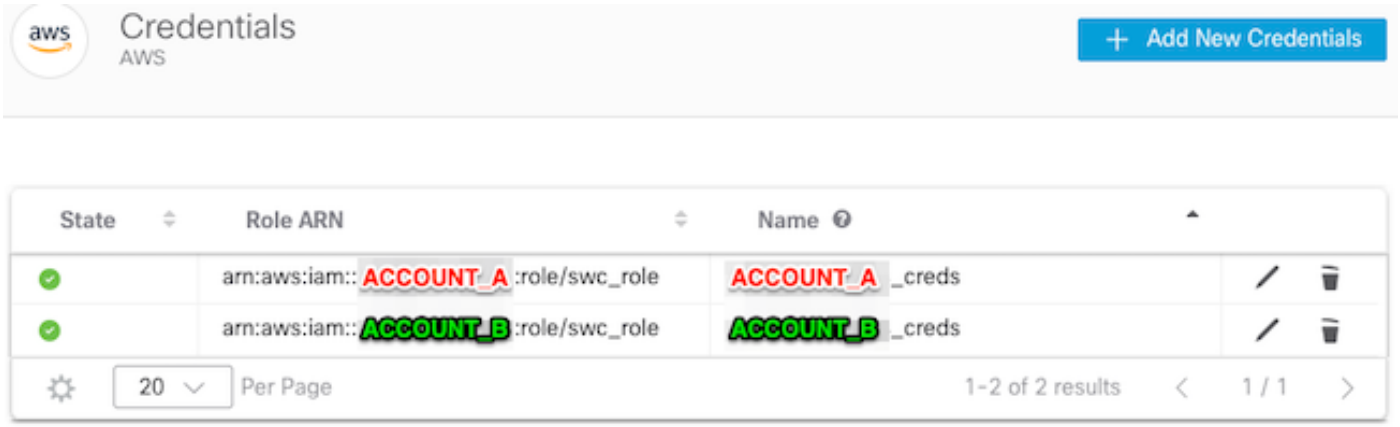
验证

使用本部分可确认配置能否正常运行。

大约一小时后，Secure Cloud Analytics网页中的VPC Flow Logs（VPC流日志）页面看起来就像此图像。VPC流日志的URL页面： **https://portal-name.obsrvbl.com/v2/#/settings/integrations/aws/vpc_logs**



您的AWS凭证页面如下所示：



故障排除

本部分提供了可用于对配置进行故障排除的信息。

如果您在VPC流日志页面上未看到相同结果，则您需要启用AWS S3的服务器访问日志记录。

S3服务器访问日志记录示例（SCA传感器从S3获取数据）：

acfb735656a2b1bbd16c05582b753d11a9306f3a8dc20a4b9edc8c999aef9dd2 S3_BUCKET_NAME [10/Apr/2022:22:55:12 +0000] 10.0.129.197 arn:aws:sts::ACCOUNT_A_ID:assumed-role/swc_role/b401ed3c-58d1-472d-ab20-4801d0a7 CSQPM6SB0YZNWE03 REST.GET.BUCKET - "GET /?list-type=2&delimiter=%2F&prefix=AWSLogs%2FACCOUNT_B_ID%2Fvpcflowlogs%2F&encoding-type=url HTTP/1.1" 200 - 421 - 13 13 "-" "Boto3/1.17.85 Python/3.6.9 Linux/5.4.0-1064-aws Botocore/1.20.85" - ghD4o28lk0G1X3A33qCtXIg4qDRfo4eN3uebyV+tdCBQ6tOHk5XvLHGwbd7/EKXdzX+6PQxLHys= SigV4 ECDHE-RSA-AES128-GCM-SHA256 AuthHeader S3_BUCKET_NAME.s3.amazonaws.com TLSv1.2 -
acfb735656a2b1bbd16c05582b753d11a9306f3a8dc20a4b9edc8c999aef9dd2 S3_BUCKET_NAME [10/Apr/2022:22:55:12 +0000] 10.0.129.197 arn:aws:sts::ACCOUNT_A_ID:assumed-role/swc_role/b401ed3c-58d1-472d-ab20-4801d0a7 CSQTXPDG4G6MY2CR REST.GET.BUCKET - "GET /?list-type=2&delimiter=%2F&prefix=AWSLogs%2F&encoding-type=url HTTP/1.1" 200 - 445 - 33 33 "-" "Boto3/1.17.85 Python/3.6.9 Linux/5.4.0-1064-aws Botocore/1.20.85" - geCd2CjQUqwxYjVs0JUt+gyEuKw92p3iJt52qx0A+bOaWhjaiNI77OxGqmvFlJZpMT5GePh6i9Y= SigV4 ECDHE-RSA-AES128-GCM-SHA256 AuthHeader S3_BUCKET_NAME.s3.amazonaws.com TLSv1.2 -
acfb735656a2b1bbd16c05582b753d11a9306f3a8dc20a4b9edc8c999aef9dd2 S3_BUCKET_NAME [10/Apr/2022:22:55:12 +0000] 10.0.129.197 arn:aws:sts::ACCOUNT_A_ID:assumed-role/swc_role/b401ed3c-58d1-472d-ab20-4801d0a7 CSQVVKEPV0XD9987 REST.GET.BUCKET - "GET /?list-type=2&delimiter=%2F&prefix=AWSLogs%2FACCOUNT_A_ID%2Fvpcflowlogs%2F&encoding-type=url HTTP/1.1" 200 - 421 - 11 11 "-" "Boto3/1.17.85 Python/3.6.9 Linux/5.4.0-1064-aws Botocore/1.20.85" - hHR2+J5engOwp/Bi7Twn5ShsDXNYnH5rcB8YByFJP5OnZb64S1Y7/d+c7BSbBb861TpuJ0Jtpes= SigV4 ECDHE-RSA-AES128-

GCM-SHA256 AuthHeader S3_BUCKET_NAME.s3.amazonaws.com TLSv1.2 -

日志字段参考：https://docs.aws.amazon.com/AmazonS3/latest/userguide/LogFormat.html

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