Configure Logstash to Access S3 bucket using arn_role
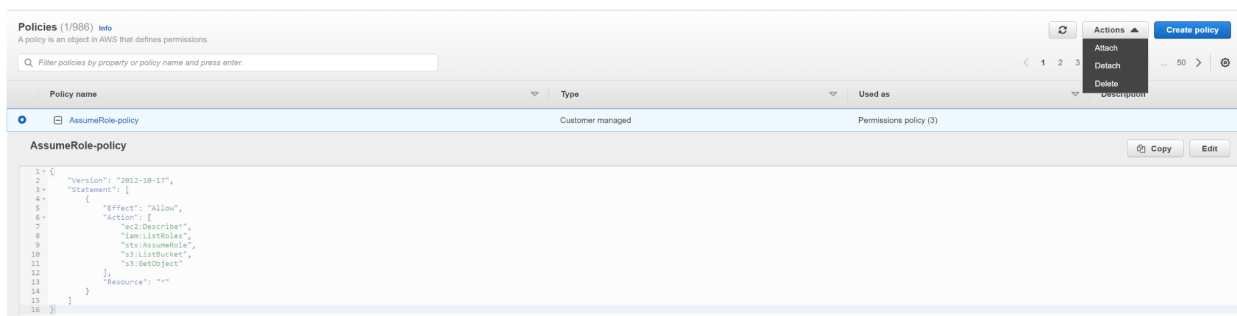
AWS: [Assume an IAM role](#)
Logstash: [S3 input plugin](#)

1. In Identity and Access Management (IAM) → Create Policy

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "ec2:Describe*",
                "iam:ListRoles",
                "sts:AssumeRole",
                "s3:ListBucket",
                "s3:GetObject"
            ],
            "Resource": "*"
        }
    ]
}
```

2. Attach policy to user ⇒ **monitor-user**

3. Create a new Role "**Monitor**" with the following settings

Trust Relationship

```json
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Principal": {
                "AWS": "arn:aws:iam::1111111111:user/monitor-user"
            },
            "Action": "sts:AssumeRole"
        }
    ]
}
```

Create a Policy and Attach it to the role:

```json
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "ec2:Describe*",
                "iam:ListRoles",
                "sts:AssumeRole"
            ],
            "Resource": "*"
        }
    ]
}
```

4. Apply the following Logstah input configuration:

```
input {
    s3 {
        access_key_id => "xxxxxxxxxxxxxxxxxxxx"
        secret_access_key => "xxxxxxxxxxxxxxxxxxxxxxxx"
        bucket => "jorj-elk-test"
        region => "eu-central-1"
        role_arn => "arn:aws:iam::111111111111:role/Monitor"
    }
}
```

5. Using a local file logstash output configuration, the S3 events in the bucket were retrieved successfully using **role_arn**

```
output {
    stdout { }
    file {
        path => '/var/log/s3-output.json'
    }
}
```

{"@timestamp":"2022-11-03T21:00:05.372409Z","@version":"1","message":"Logstash arn_role test\r\n","event":{"original":"Logstash arn_role test\r\n"}}

{"@timestamp":"2022-11-03T21:00:05.429537Z","@version":"1","message":"Logstash arn_role test\r\n","event":{"original":"Logstash arn_role test\r\n"}}

{"@timestamp":"2022-11-03T21:00:05.430188Z","@version":"1","message":"Logstash arn_role test\r\n","event":{"original":"Logstash arn_role test\r\n"}}

{"@timestamp":"2022-11-03T21:00:05.426898Z","@version":"1","message":"Logstash arn_role test\r\n","event":{"original":"Logstash arn_role test\r\n"}}

{"@timestamp":"2022-11-03T21:00:05.428866Z","@version":"1","message":"Logstash arn_role test\r\n","event":{"original":"Logstash arn_role test\r\n"}}

{"@timestamp":"2022-11-03T21:00:05.429285Z","@version":"1","message":"Logstash arn_role test\r\n","event":{"original":"Logstash arn_role test\r\n"}}