

JORDAN HAMELSR MGR SOFTWARE DEVELOPMENT ENGINEERING

AMGEN®

ABOUT AMGEN

Amgen is a values-based company, deeply rooted in science and innovation to transform new ideas and discoveries into medicines for patients with serious illnesses.

Our Mission is to Serve Patients Please visit amgen.com to learn more

The views expressed herein represent those of the presenter and do not necessarily represent the views or practices of the Amgen or any other pa



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ARE 11-56 13 ft 16 response (1601) #9 Treat/ling in 122 resp. (does -30). Client 60 # 13970 # 10 resp. (err. gener, and "increasing") but _SC, (from _befoliosobless the spectral gener does not cliff-folioble-sed service.

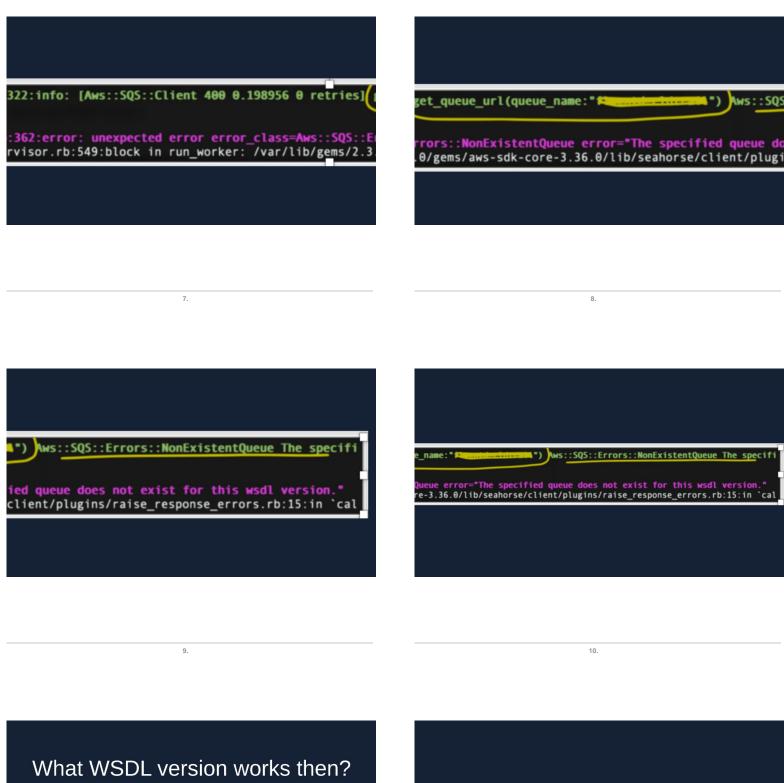
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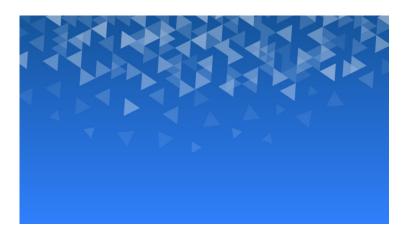


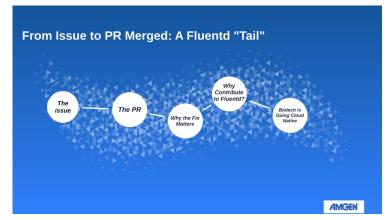
2018-11-06 19:45:36 +0000 [info]: #0 fluent/log.rb:
ed queue does not exist for this wsdl version.

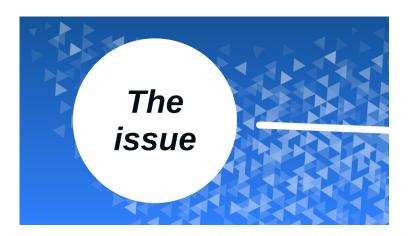
2018-11-06 19:45:36 +0000 [error]: #0 fluent/log.rb
2018-11-06 19:45:36 +0000 [error]: #0 fluent/supe

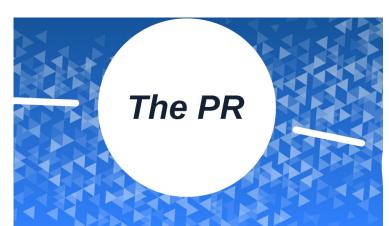


What WSDL version works then? e_name: "Family throws") ws::505::Errors::NonExistentQueue The specifi Queue error="The specified queue does not exist for this wsdl version." re-3.36.0/lib/seahorse/client/plugins/raise_response_errors.rb:15:in 'cal





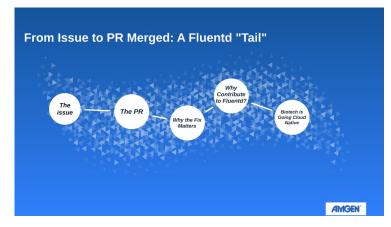












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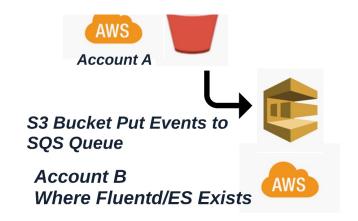
Architecture - What We Needed to Do With The S3 Input Plugin





Every Account Writes
Cloudtrail Logs to a
Single S3 Bucket

1.







S3 plugin will AssumeRole in Account A to access the bucket & read sqs queue in Account B to read each S3 object key for cloudtrail gz objects for decompression

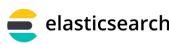












Architecture - What We Needed to Do With The S3 Input Plugin







@ @ [] * -@ @ [] * fluentd t s3_bucket QQ * t s3_key Q Q 🗆 * AWSLogs, t tag Q Q III * cloudtrail.all

chitecture - What We Needed to Do With The S3 Input Plugin









fluent-plugin-s3 Issue #247+ PR #248

fluent-plugin-s3 Issue #247+ PR #248

- · IAM User/Key + local account queue and bucket worked!
- · I tried using the assume role feature and failed no region set

32

fluent-plugin-s3 Issue #247+ PR #248

- · IAM User/Key + local account queue and bucket worked!
- I tried using the assume role feature and failed no region set



If aws_key_id and aws_sec_key are declared, no assume role

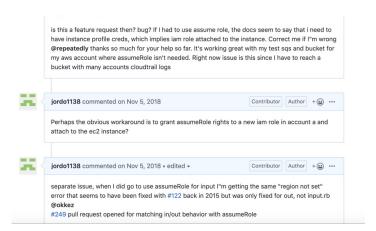
takes place #247

Common places #247

Investigation of the place of the places of

3.





attach to the ec2 instance?

jordo1138 commented on Nov 5, 2018 • edited -

Contributor Author + • •

separate issue, when I did go to use assumeRole for input I"m getting the same "region not set" error that seems to have been fixed with #122 back in 2015 but was only fixed for out, not input.rb @okkez

#249 pull request opened for matching in/out behavior with assumeRole

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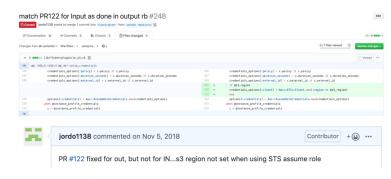
#249 pull request opened for matching in/out behavior with assumeRole

37.

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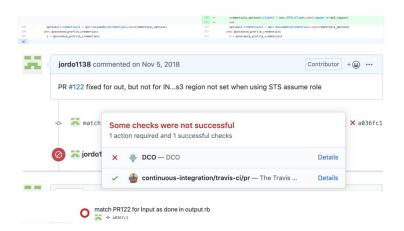


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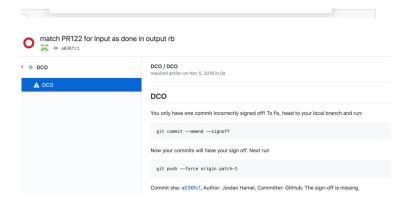


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41.

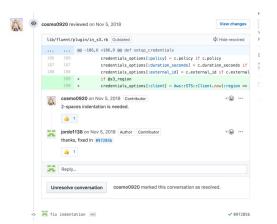


fluent-plugin-s3 PR #249 Issue #250



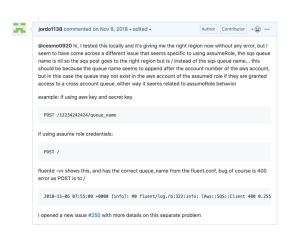


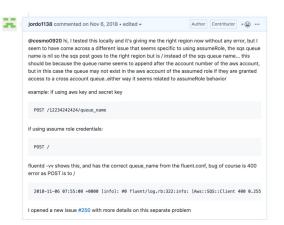
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Input SQS queue name not added to the URI properly wusing AssumeRole #250

Common jurisdate general this issue on Nov 6, 2018 - comments

profestible commented on Nov 6, 2018 - collect
Constitute* | 4@ --
Input SQS queue have been seen to the collect of the collect of the collect of the plant set region issue 2020, I food a interesting log where when assuming the row, I, am able to assume the form. Assumes the queue interesting logs where when assuming the row, I, am able to assume the row of the collect of the row of

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Input SQS queue name not added to the URI properly vision AssumeRole #250

Colorador profession and the state on Nov. 6, 2018 - 2 comments

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SER-11-6 13-0-16 -0000 [Info]: #F Theor/Ing.rb:1222:info; [Am::37:.Cites @F.1.102 & retries] list_deject/backet: ****

SER-11-6 13-0-16 -0000 [Info]: #F Theor/Ing.rb:1222:info; [Am::37:.Cites @F.1.102 & retries] list_deject/backet: ****

SER-11-6 13-0-16 -0000 [Info]: #F Theor/Ing.rb:1222:info; [Am::37:.Cites @F.1.102 & retries] list_deject/backet: ****

SER-11-6 13-0-16 -0000 [Info]: #F Theor/Ing.rb:1222:info; [Am::37:.Cites @F.1.102] #F retries] list_deject/backet: ****

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SER-11-6 13-0-16 -0000 [Info]: #F Theor/Ing.rb:1222:info; [Am::37:.Cites @F.1.102] #F retries] list_deject/backet: ***

SER-11-6 13-0-16 -0000 [Info]: #F Theory | F Theory

51.

```
2018-11-06 19:45:36 +0000 [debug]: #0 fluent/log
2018-11-07 19:45:36 +0000 [debug]: #0 fluent/log
This should show account number(queue_name)
.us-west-2.amazonaws.com:443
SSL established
<- "POST / HTTP/1.1\r\nContent-Type: application
st: sqs.us-west-2.amazonaws.com\r\nX-Amz-Date: 2

CTCdentTot ASTAZASTIONTE ASDAGGOSTON r\nContent-
-> "HTTP/1.1 400 Bad Request\r\n"
-> "Y-amzn-RequestId: Obcc6f99-a932-53d2-9c05-3b
```

```
About 53,700 results (0.59 seconds)

The specified queue does not exist for this wedl version - Issue ...

Application of the second place of the
```

About 53,700 results (0.59 seconds)

The specified queue does not exist for this wsdl version · Issue ...

https://github.com > aws > aws-sdk-php-laravel > issues ▼

Getting "The specified queue does not exist for this wsdl ...

https://github.com > aws > aws-sdk-java > issues ▼

Apr 29, 2019 - Getting "The specified queue does not exist for this wsdl version" on AmazonSQS. ... AmazonSQS sqs = AmazonSQSClientBuilder.standard() ... https://docs.aw.amazon.com/sdk-for-java/v1/developer-guide/java-dg-region- ...

Observation that MODI and the MMO Decele of Females

i.

Spoiler Alert: "It's not the wsdl version"

```
require 'fluent/plugin/input'
require 'fluent/plugin/input'
require 'fluent/log-ext'

require 'aws-sdk-sa'
require 'aws-sdk-sqs'
require 'aws-sdk-sqs/queue_poller'
require 'cgi/util'
require 'zlib'
require 'time'
require 'tempfile'
```

7.

```
c@ -1,191 +1,194 @@

require 'fluent/plugin/input'
require 'fluent/log-ext'

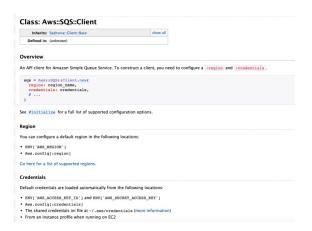
require 'aws-sdk-s3'
require 'aws-sdk-sqs/queue_poller'
require 'dws-sdk-sqs/queue_poller'
require 'cgi/util'
require 'time'
require 'time'
require 'tempfile'
```

Read up on what you do know (you know more than you feel you do right now)

```
require 'fluent/plugin/input'
require 'fluent/log-ext'

require 'aws-sdk-s3'
require 'aws-sdk-sqs'
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require 'cgi/util'
require 'cgi/util'
require 'time'
require 'tempfile'
```

Read up on what you do know (you know more than you feel you do right now)



$\begin{tabular}{ll} \begin{tabular}{ll} \beg$

Returns the URL of an existing Amazon SQS queue.

To access a queue that belongs to another AWS account, use the queueOwnerAWSAccountId parameter to specify the account ID of I grant you permission to access the queue. For more information about shared queue access, see AddPermission or see Allow Deve in the Amazon Simple Queue Service Developer Guide.

Examples:

• Request syntax with placeholder values

```
resp = client.get_queue_url({
   queue_name: "String", # required
   queue_owner_aws_account_id: "String",
})
})
```

Response structure

```
resp.queue_url #=> String
```

Options Hash (options):

• :quouo_name (required, String) — The name of the queue whose URL must be fetched. Maximum 80 characters. Valid values: a underscores ().

63.

```
config_section :sqs, required: true, multi: false do

desc "SQS queue name"

config_param :queue_name, :string, default: nil

desc "Use 's3_region' instead"

config_param :endpoint, :string, default: nil

desc "Stsp message deletion"

83

@2 -133,7 +135,7 @ def start

sqs_client = create_sqs_client
log.debug("Succeeded to create SQS client")

response = sqs_client.get_queue_url(queue_name: @sqs.queue_name)

138 +

sqs_queue_url = response.queue_url
log.debug("Succeeded to get SQS queue URL")

140

@0 -186,6 +188,9 @ def setup_credentials

credentials_options[:duration_seconds] = c.duration_seconds if c.duration_seconds

credentials_options[:duration_seconds] = c.duration_seconds if c.duration_seconds

credentials_options[:external_id] = c.external_id if c.external_id
```

65

```
\#get\_queue\_url(options = \{\}) \Rightarrow Types::GetQueueUrlResult
```

Returns the URL of an existing Amazon SQS queue.

To access a queue that belongs to another AWS account, use the Queue's owner must parameter to specify the account ID of the queue's owner. The queue's owner must grant you permission to access the queue. For more information about shared queue access, see Addressission or see Allow Developers to Write Messages to a Shared Queue in the Amszon Simple Queue Environment of County County

Examples:

• Request syntax with placeholder values

```
resp = client.get_quoue_url{{
   queue_name: "String", # required
   queue_owner_aws_account_id: "String",
})
```

→ Response structure

resp.queue_url >-> S

Options Hash (options):

• rqueue_name (required, String) — The name of the queue whose URL must be fetched. Maximum 80 characters. Valid values: alphanumeric characters, hyphens (—), and underscores (__).

• :queue_owner_ams_account_id (String) — The AWS account ID of the account that created the queue.

Returns

(Types::GetQueueUrlResult) — Returns a response object which responds to the following method

#queue_url => String

AWS API Documentation

62

```
\#get\_queue\_url(options = \{\}) \Rightarrow Types::GetQueueUrlResult
```

Returns the URL of an existing Amazon SQS queue.

To access a queue that belongs to another AWS account, use the queue-ownerAWSAccount a parameter to specify the account ID of I grant you permission to access the queue. For more information about shared queue access, see AddPermission or see Allow Deve in the Amazon Simple Queue Service Developer Guide.

Examples:

> Request syntax with placeholder values

```
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   queue_owner_aws_account_id: "String",
})
```

Response structure

```
resp.queue_url #=> String
```

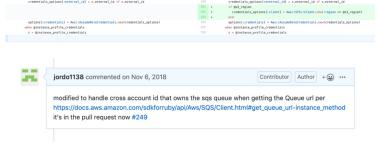
Options Hash (options):

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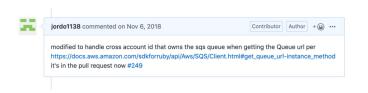
```
config_section (sqs, required: true, mutti: fatse do
       desc "SQS queue name"
        config_param :queue_name, :string, default: nil
        desc "SQS Owner Account ID"
       config_param :queue_owner_aws_account_id, :string, default: nil
        desc "Use 's3_region' instead"
       config_param :endpoint, :string, default: nil
        desc "Skip message deletion"
        sqs_client = create_sqs_client
        log.debug("Succeeded to create SQS client")
        response = sqs_client.get_queue_url(queue_name: @sqs.queue_name, queue_owner_aws_account_id:
@sqs.queue_owner_aws_account_id)
        sqs_queue_url = response.queue_url
        log.debug("Succeeded to get SQS queue URL")
          credentials_options[:policy] = c.policy if c.policy
          credentials_options[:duration_seconds] = c.duration_seconds if c.duration_seconds
```





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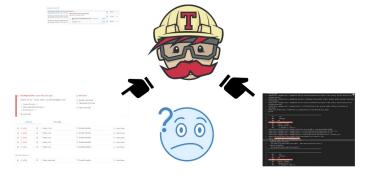
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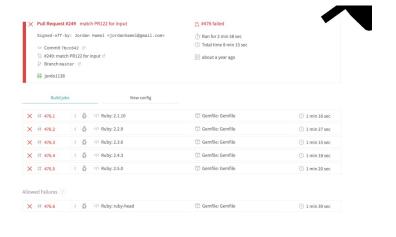


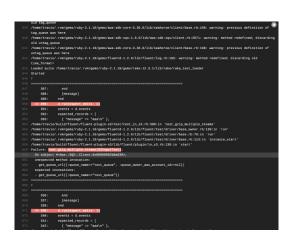
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"Not so fast" - Travis CI

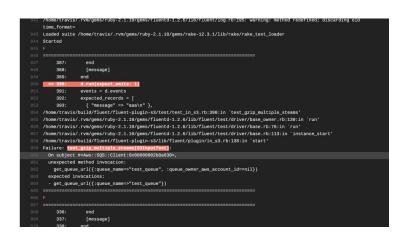


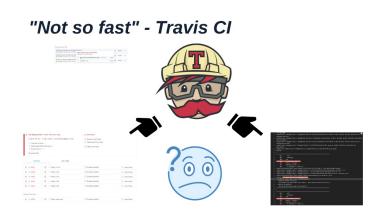




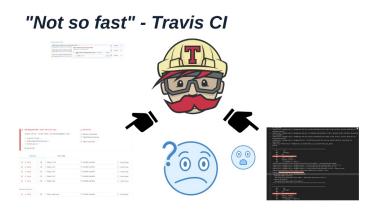


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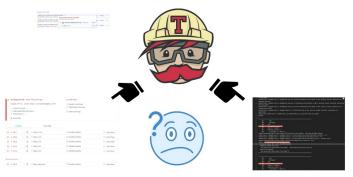




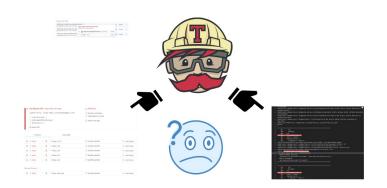


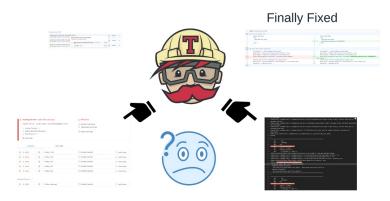






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Finally Fixed



Finally Fixed



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Finally Fixed



Finally Fixed



87.

Finally Fixed

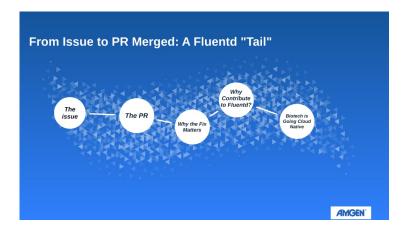


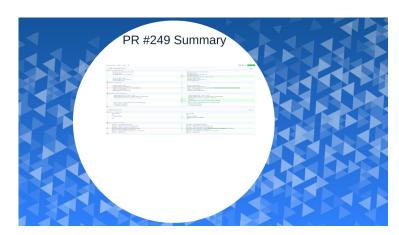
You don't work for Travis CI Travis CI works for you!







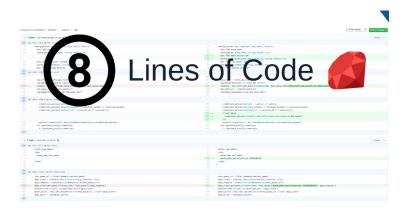


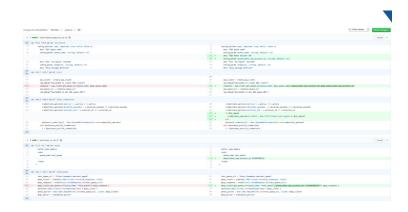


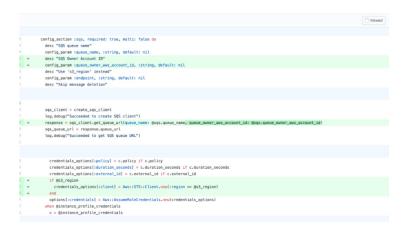




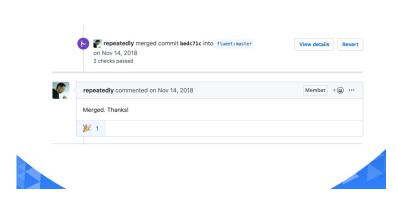
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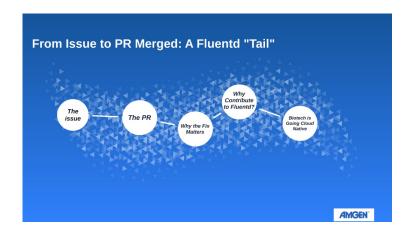












10



Now Amgen's Cloudtrail data was usable in near realtime (AWS delivery SLA is around 5min)

The fluentd pipeline accommodated our security account setup where the owner of the central cloudtrail bucket for all accounts doesn't have to be the owner of the sqs account.



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The record_transformer, rewrite_tag_filter, exec_out, plugin manipulates each record of cloudtrail for specific use cases by accounts,



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The record_transformer, rewrite_tag_filter, exec_out, plugin manipulates each record of cloudtrail for specific use cases by accounts, regions, or content and retention needs



The solution scales with # of accounts Scale the # of fluentd containers to the

-i---f

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104.



The fluentd pipeline accommodated our security account setup where the owner of the central cloudtrail bucket for all accounts doesn't have to be the owner of the sqs account.



The record_transformer, rewrite_tag_filter, exec_out, plugin manipulates each record of cloudtrail for specific use cases by accounts, regions, or content and retention needs



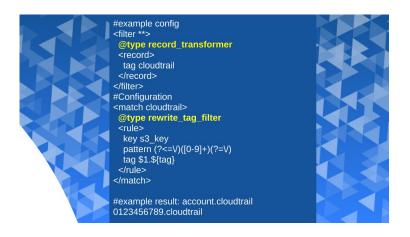
The solution scales with # of accounts Scale the # of fluentd containers to the

ngen's Cloudtrail data was usable in titime (AWS delivery SLA is around with the continue of the central uil bucket for all accounts doesn't have e owner of the sqs account.

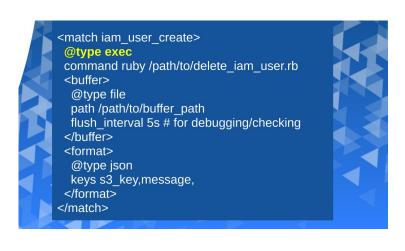
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utton scales with # of accounts to the your sqs queue

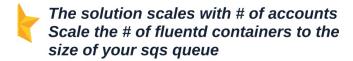
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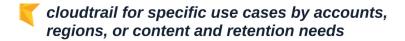
<filter **> @type grep <reaexp> key message pattern /CreateIAMUser/ </regexp> <regexp> key region pattern /eu-west-2/ </reaexp> </filter> <filter **> @type record transformer <record> tag iam_user_create </record> </filter>

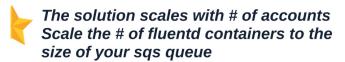


cloudtrail for specific use cases by accounts, regions, or content and retention needs



09.





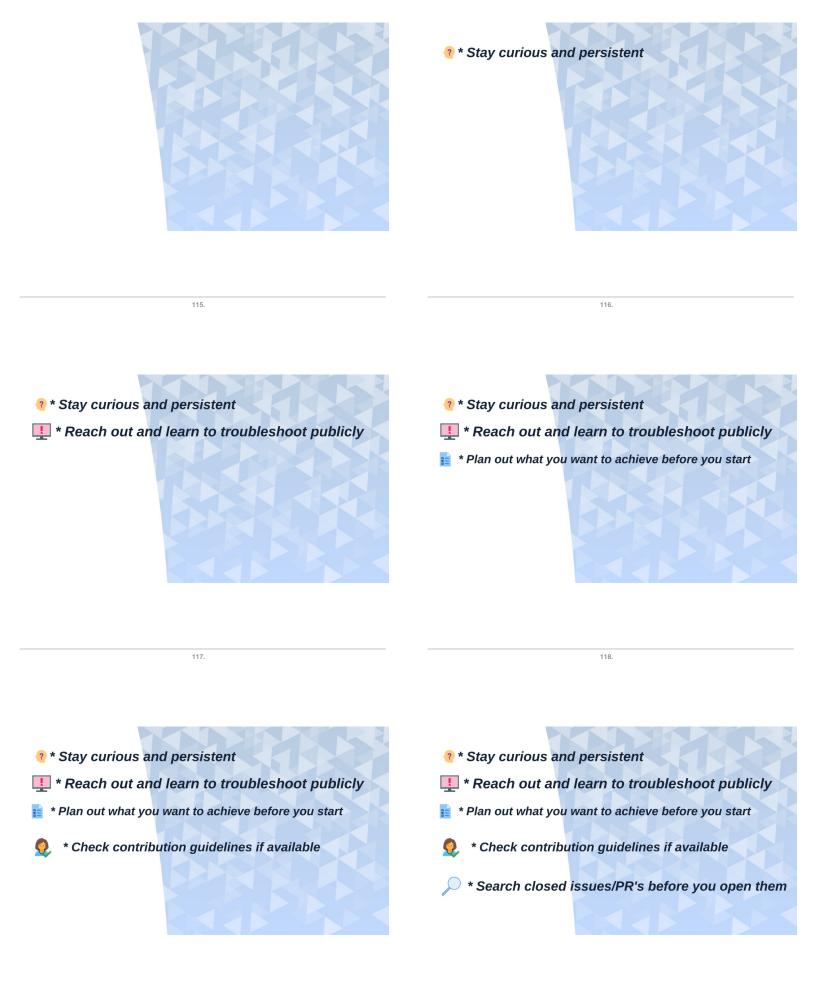


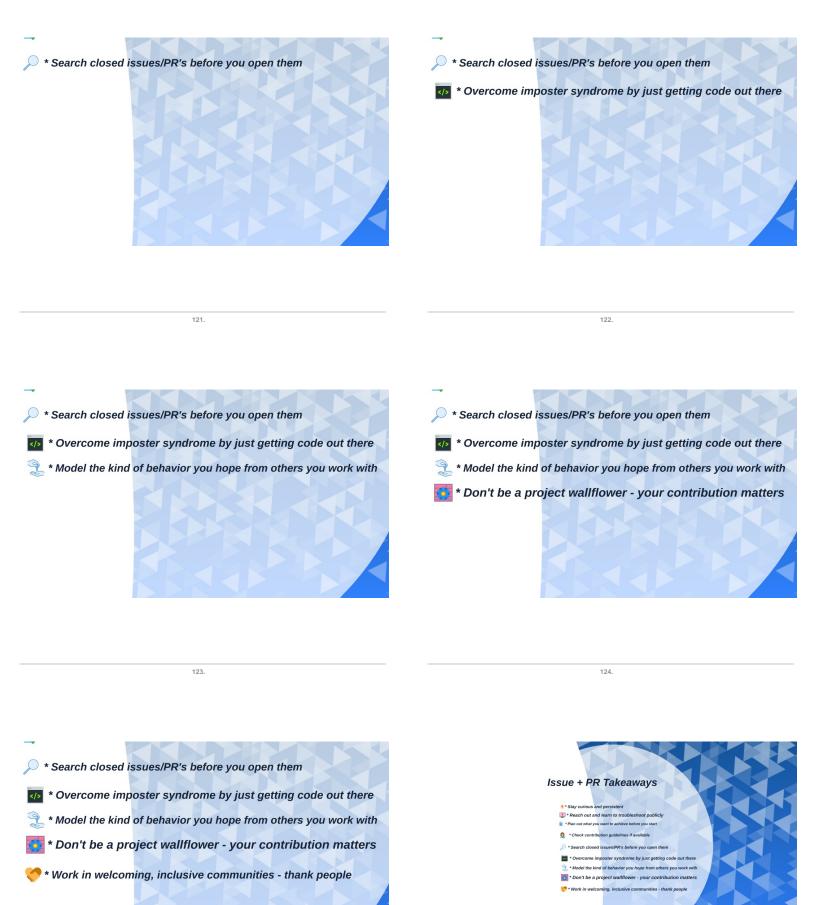
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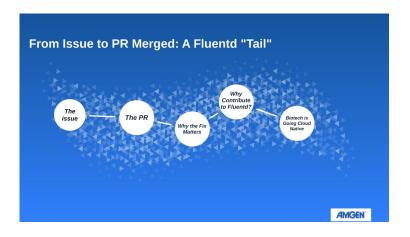




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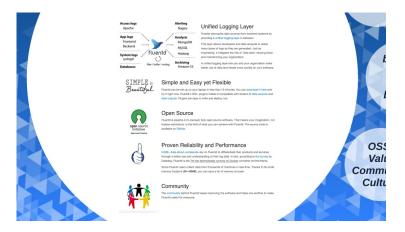




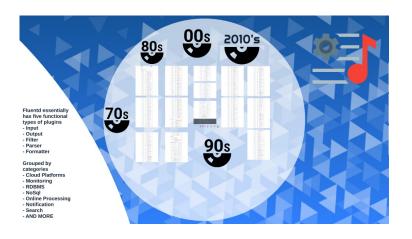


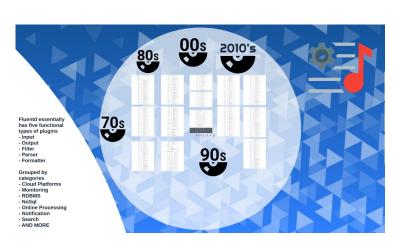


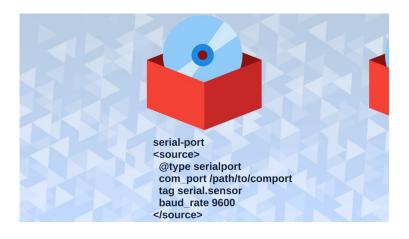


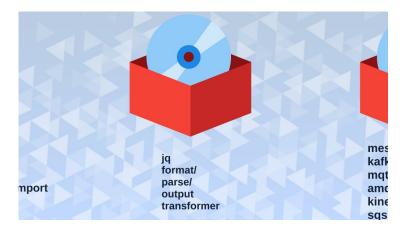


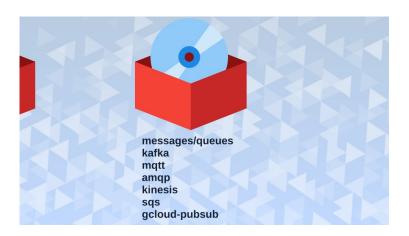
129.

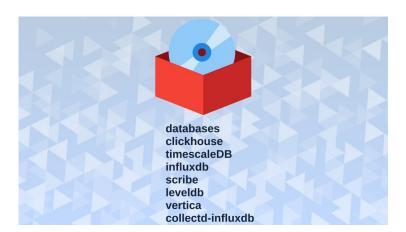




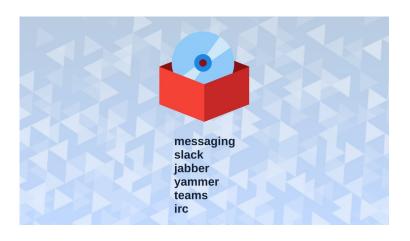








135.

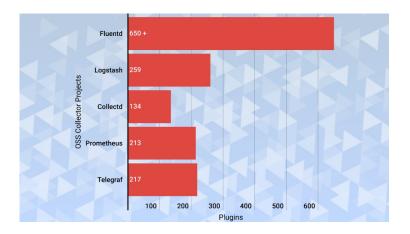


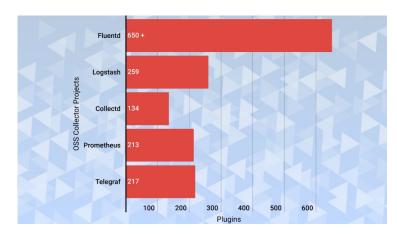




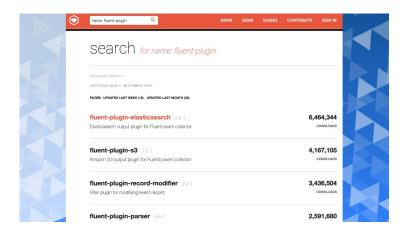


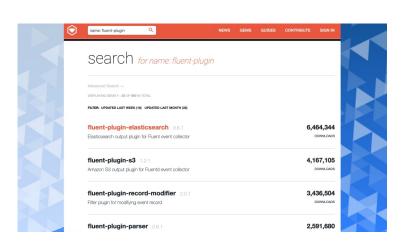
39. 140.

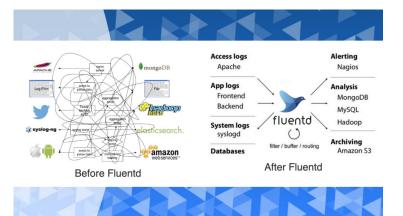




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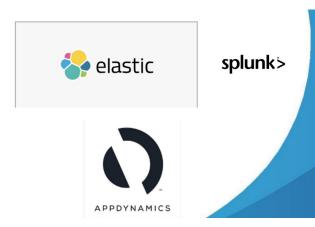






147.















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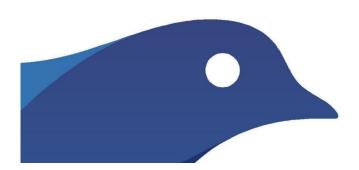












Open Source Apache 2.0 License As The End Users of OSS grows in the enterprise, so will the value of contributing and so contributions will be up. It's the ultimate feedback loop. Cloud Native designs and platforms actually collapse the problem space: for later, shared problems, need to collaborate outside to get things done at the speed of competitors. If you need to move, mutate, store, and retrieve data, Fluentd is a lasting & importantly loosely coupled implementation. Approximately 90% of the plugins are community driven Placed as written in Publy Nov's the profuseword? The red performs an entire of the Public is an entire of the Public is a service of a matter beautiful to the tension of the service of the

approximately 90% of the plugins are community driven

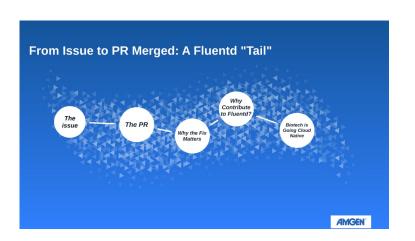
Fluentd is written in Ruby. How's the performance?

The most performance sensitive parts of Fluentd are written in C. The Ruby code acts as a wrapper that provides flexibility to the overall solution. In particular, the networking layer and object serialization layer are written in C (See cool.io and MessagePack, both are maintained by Fluentd maintainers too).

Since Fluentd is not written entirely in C or C++, it may be slow in its Ruby parts. But by giving up a little bit of speed, we have gained many plugins from the Ruby community:). Fluentd's performance has been put to the test at many large services; in fact, a regular PC box can handle 18,000 messages/second with a single process.

If this number is insufficient for your application, please consider other solutions which are written entirely in C-family or Java. However, please note that you will lose some flexibility as a tradeoff.

59.





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Amgen's is one of the world's largest biotech companies and their footprint spans over 120 countries - distributed teams and work drives distributed computing and networks

The FDA Likes Traceabilty and Reproducibility
The entire industry wants to get therapies from discovery to
delivery faster and at a lower cost - without losing quality or
safety

Cloud Native Makes Sense for Biotech

Amgen's is one of the world's largest biotech companies and their footprint spans over 120 countries - distributed teams and work drives distributed computing and networks

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safety

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"At Amgen, we discover, develop and manufacture medicines to enable more moments in the lives of more people. Moments of joy, moments of friendship—moments of life. For moments like these, we innovate and we work—boldly, tirelessly and passionately to serve the ones that matter—patients. " - Amgen.com "Our Commitment to Patients"

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" - Amgen.com "Our Commitment to Patients"

Thank you! Fluentd Community Arm Treasure Data - Masahiro & Eduardo KubeCon + CloudNativeCon & CNCF organizers!

Email k8s@amgen.com if you're interested in building meaningful products at Amgen

tw: @jordanjohnhamel

