

Delivering Content on AWS with Amazon CloudFront

TROUBLESHOOTING CLOUDFRONT



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CLOUD ARCHITECT
@adyrucz

“Everything fails all the time.”

Werner Vogel, CTO for AWS

CloudFront Failure Areas



CloudFront Failure Areas



CloudFront Failure Areas

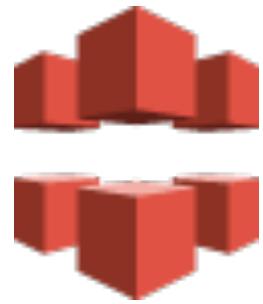


Origin

CloudFront Failure Areas



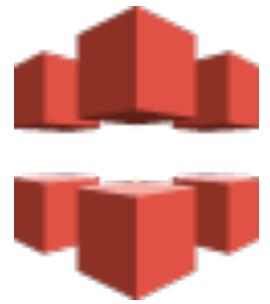
Origin



CloudFront Failure Areas



Origin

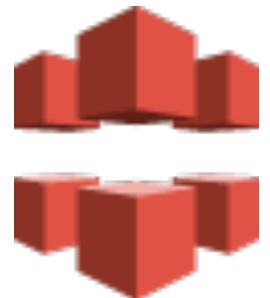


CloudFront

CloudFront Failure Areas



Origin



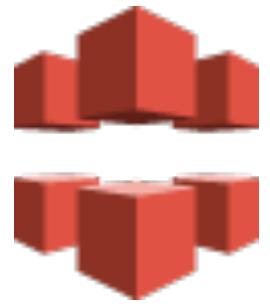
CloudFront



CloudFront Failure Areas



Origin



CloudFront



Lambda@Edge



Failures Happen...

Awareness Tools

Awareness Tools



Awareness Tools

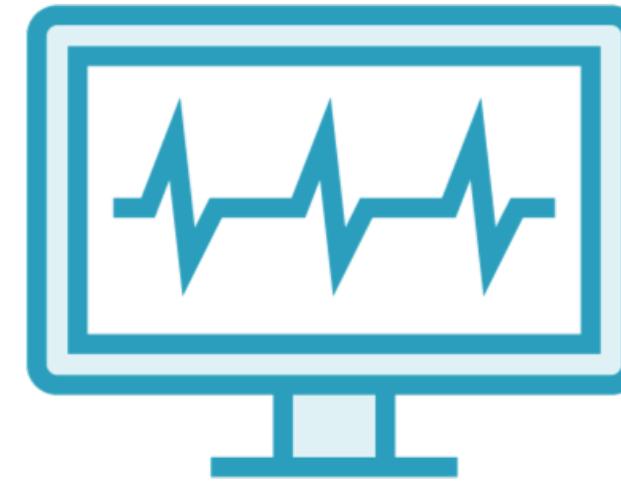


**CloudFront
Logging**

Awareness Tools



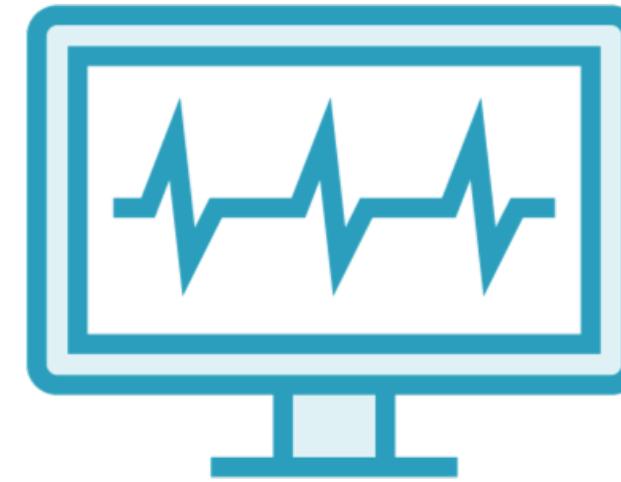
**CloudFront
Logging**



Awareness Tools



**CloudFront
Logging**



**CloudWatch
Metrics & Alarms**

Awareness Tools



**CloudFront
Logging**



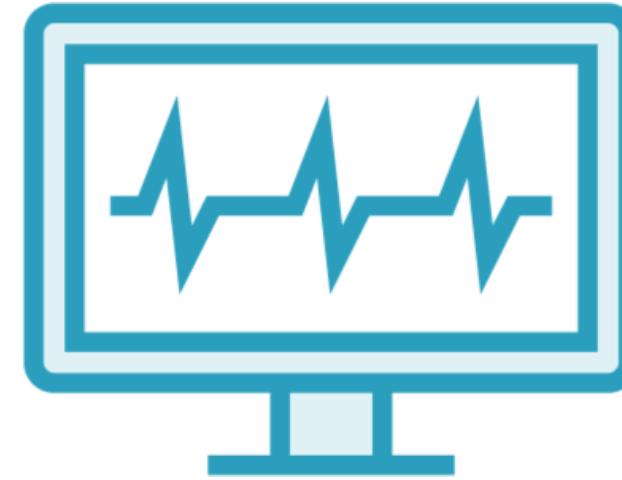
**CloudWatch
Metrics & Alarms**



Awareness Tools



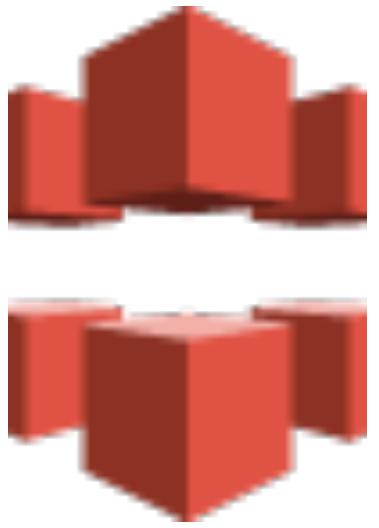
**CloudFront
Logging**



**CloudWatch
Metrics & Alarms**



Troubleshooting



Goal

- Troubleshoot issues using AWS Tools & Services

Logging



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AWS CloudFront Management X S3 Management Console X

https://console.aws.amazon.com/cloudfront/home#distributions:

Services ▾ Resource Groups ▾

CloudFront

Distributions Create Distribution Distribution Settings Delete Enable Disable

What's new *

Reports & analytics

- Cache statistics
- Monitoring
- Alarms
- Popular objects
- Top referrers
- Usage
- Viewers

Security

- Origin access identity
- Public key
- Field-level encryption

CloudFront Distributions

Viewing : Any Delivery Method ▾ Any State ▾

| | Delivery Method | ID | Domain Name | Comment | Origin | CNAMEs | Status | State | L |
|--------------------------|-----------------|---------------|-------------------------------|---------|------------|-------------|----------|---------|---|
| <input type="checkbox"/> | Web | ES6J41BR5J5GT | d2ee8i73kfyy7w.cloudfront.net | - | pluralsigh | www.dyrcz.r | Deployed | Enabled | 2 |

Viewing 1 to 1 of 1

AWS CloudFront Management X S3 Management Console X

https://console.aws.amazon.com/cloudfront/home#distribution-settings:ES6J41BR5J5GT

CloudFront Distributions > ES6J41BR5J5GT

Distributions General Origins and Origin Groups Behaviors Error Pages Restrictions Invalidations Tags

What's new *

Edit

Distribution ID ES6J41BR5J5GT
ARN arn:aws:cloudfront::359659591268:distribution/ES6J41BR5J5GT
Log Prefix -
Delivery Method Web
Cookie Logging Off
Distribution Status Deployed
Comment -
Price Class Use All Edge Locations (Best Performance)
AWS WAF Web ACL -
State Enabled

Alternate Domain Names (CNAMEs) www.dyrcz.me
SSL Certificate dyrcz.me (88a3a983-59d1-41be-9345-85c23c54c5f6)
Domain Name d2ee8i73kfyy7w.cloudfront.net
Custom SSL Client Support Clients that Support Server Name Indication (SNI) - (Recommended)
Security Policy TLSv1.2_2018
Supported HTTP Versions HTTP/2, HTTP/1.1, HTTP/1.0
IPV6 Enabled

CloudFront

Distributions Reports & analytics Security

Cache statistics Monitoring Origin access identity Public key Field-level encryption

Monitoring Alarms Popular objects Top referrers Usage Viewers

Popular objects Top referrers Usage Viewers

Alarms Popular objects Top referrers Usage Viewers

Popular objects Top referrers Usage Viewers

Top referrers Usage Viewers

Usage Viewers

Viewers

Feedback English (US)

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AWS CloudFront Management X S3 Management Console X +

https://console.aws.amazon.com/cloudfront/home#

Services Resource Groups ⚡ durst Global Support

Supported HTTP Versions HTTP/2, HTTP/1.1, HTTP/1.0 HTTP/1.1, HTTP/1.0 i

Default Root Object index.html i

Logging On Off i

Bucket for Logs i

Log Prefix i

Cookie Logging On Off i

Enable IPv6 i

Learn more

Comment i

Distribution State Enabled Disabled i

Cancel **Yes, Edit**

AWS CloudFront Management X S3 Management Console X +

https://console.aws.amazon.com/cloudfront/home#

Services Resource Groups ⚡ durst Global Support

Supported HTTP Versions HTTP/2, HTTP/1.1, HTTP/1.0 HTTP/1.1, HTTP/1.0 i

Default Root Object index.html i

Logging On Off i

Bucket for Logs i

Log Prefix i

Cookie Logging On Off i

Enable IPv6 i

Learn more

Comment i

Distribution State Enabled Disabled i

Cancel **Yes, Edit**

AWS CloudFront Management X S3 Management Console X +

https://console.aws.amazon.com/cloudfront/home#

Services Resource Groups ⌂

durst Global Support

Supported HTTP Versions HTTP/2, HTTP/1.1, HTTP/1.0 HTTP/1.1, HTTP/1.0 i

Default Root Object index.html i

Logging On Off i

Bucket for Logs theevent-logs.s3.amazonaws.com i

Log Prefix i

Cookie Logging On Off i

Enable IPv6 i

Learn more

Comment i

Distribution State Enabled Disabled i

Cancel Yes, Edit

AWS CloudFront Management X S3 Management Console X +

https://console.aws.amazon.com/cloudfront/home#

Services ▾ Resource Groups ▾

durst ▾ Global ▾ Support ▾

Supported HTTP Versions HTTP/2, HTTP/1.1, HTTP/1.0 HTTP/1.1, HTTP/1.0 i

Default Root Object index.html i

Logging On Off i

Bucket for Logs theevent-logs.s3.amazonaws.com i

Log Prefix cloudfront/ES6J41BR5J5GT/ i

Cookie Logging On Off i

Enable IPv6 i

Learn more

Comment i

Distribution State Enabled Disabled i

Cancel Yes, Edit

S3 Management Console

https://s3.console.aws.amazon.com/s3/buckets/theevent-logs/?region=ap-southeast-2&tab=overview

Services Resource Groups

durst Global Support

Amazon S3 > theevent-logs

Overview Properties Permissions Management

Type a prefix and press Enter to search. Press ESC to clear.

Upload Create folder Download Actions EU (Ireland)

| Name | Last modified | Size | Storage class |
|------------|---------------|------|---------------|
| alb | -- | -- | -- |
| cloudfront | -- | -- | -- |
| compute | -- | -- | -- |
| s3 | -- | -- | -- |

Viewing 1 to 4

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S3 Management Console X +

https://s3.console.aws.amazon.com/s3/buckets/theevent-logs/cloudfront/?region=ap-southeast-2&prefix=&marker=&size=1000&sort_by=LastModified

aws Services Resource Groups ⚡ durst Global Support

Amazon S3 > theevent-logs > cloudfront

Overview

Type a prefix and press Enter to search. Press ESC to clear.

Upload Create folder Download Actions EU (Ireland) ⚡

| Name | Last modified | Size | Storage class |
|---------------|---------------|------|---------------|
| ES6J41BR5J5GT | -- | -- | -- |

Viewing 1 to 1

| Name | Last modified | Size | Storage class |
|---------------|---------------|------|---------------|
| ES6J41BR5J5GT | -- | -- | -- |

Viewing 1 to 1

S3 Management Console

https://s3.console.aws.amazon.com/s3/buckets/theevent-logs/cloudfront/ES6J41BR5J5GT/?region=eu-west-1

aws Services Resource Groups

durst Global Support

Amazon S3 > theevent-logs > cloudfront > ES6J41BR5J5GT

Overview

Type a prefix and press Enter to search. Press ESC to clear.

Upload Create folder Download Actions EU (Ireland) ▾

Viewing 1 to 117

| <input type="checkbox"/> Name | Last modified | Size | Storage class |
|--|-------------------------------------|---------|---------------|
| <input type="checkbox"/> ES6J41BR5J5GT.2019-06-23-00.251ab365.gz | Jun 23, 2019 3:01:10 AM GMT+0200 | 457.0 B | Standard |
| <input type="checkbox"/> ES6J41BR5J5GT.2019-06-23-00.730a326e.gz | Jun 23, 2019 2:36:08 AM GMT+0200 | 455.0 B | Standard |
| <input type="checkbox"/> ES6J41BR5J5GT.2019-06-23-00.7833c43e.gz | Jun 23, 2019 2:46:09 AM GMT+0200 | 463.0 B | Standard |
| <input type="checkbox"/> ES6J41BR5J5GT.2019-06-23-00.bcb9432e.gz | Jun 23, 2019 2:41:08 AM GMT+0200 | 456.0 B | Standard |
| <input type="checkbox"/> ES6J41BR5J5GT.2019-06-23-00.d2c4ffea.gz | Jun 23, 2019 2:21:08 AM --- | 457.0 B | Standard |

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AWS CloudFront Management X S3 Management Console X +

https://console.aws.amazon.com/cloudfront/home#

durst Global Support

aws Services Resource Groups

Supported HTTP Versions HTTP/2, HTTP/1.1, HTTP/1.0 HTTP/1.1, HTTP/1.0 i

Default Root Object index.html i

Logging On Off i

Bucket for Logs theevent-logs.s3.amazonaws.com i

Log Prefix cloudfront/ES6J41BR5J5GT/ i

Cookie Logging On Off i

Enable IPv6 i

Learn more

Comment i

Distribution State Enabled Disabled i

Cancel Yes, Edit

AWS CloudFront Management X S3 Management Console X

https://console.aws.amazon.com/cloudfront/home#distribution-settings:ES6J41BR5J5GT

CloudFront Distributions > ES6J41BR5J5GT

Distributions General Origins and Origin Groups Behaviors Error Pages Restrictions Invalidations Tags

What's new *

Edit

Distribution ID ES6J41BR5J5GT
ARN arn:aws:cloudfront::359659591268:distribution/ES6J41BR5J5GT
Log Prefix cloudfront/ES6J41BR5J5GT/
Delivery Method Web
Cookie Logging Off
Distribution Status InProgress
Comment -
Price Class Use All Edge Locations (Best Performance)
AWS WAF Web ACL -
State Enabled

Alternate Domain Names (CNAMEs) www.dyrcz.me
SSL Certificate dyrcz.me (88a3a983-59d1-41be-9345-85c23c54c5f6)
Domain Name d2ee8i73kfyy7w.cloudfront.net
Custom SSL Client Support Clients that Support Server Name Indication (SNI) - (Recommended)
Security Policy TLSv1.2_2018
Supported HTTP Versions HTTP/2, HTTP/1.1, HTTP/1.0
IPV6 Enabled

CloudFront Reports & analytics Cache statistics Monitoring Alarms Popular objects Top referrers Usage Viewers Security Origin access identity Public key Field-level encryption

AWS CloudFront Management X S3 Management Console X

https://console.aws.amazon.com/cloudfront/home#distribution-settings:ES6J41BR5J5GT

CloudFront Distributions > ES6J41BR5J5GT

Distributions General Origins and Origin Groups Behaviors Error Pages Restrictions Invalidations Tags

What's new *

Edit

Distribution ID ES6J41BR5J5GT
ARN arn:aws:cloudfront::359659591268:distribution/ES6J41BR5J5GT
Log Prefix cloudfront/ES6J41BR5J5GT/
Delivery Method Web
Cookie Logging Off
Distribution Status Deployed
Comment -
Price Class Use All Edge Locations (Best Performance)
AWS WAF Web ACL -
State Enabled

Alternate Domain Names (CNAMEs) www.dyrcz.me
SSL Certificate dyrcz.me (88a3a983-59d1-41be-9345-85c23c54c5f6)
Domain Name d2ee8i73kfyy7w.cloudfront.net
Custom SSL Client Support Clients that Support Server Name Indication (SNI) - (Recommended)
Security Policy TLSv1.2_2018
Supported HTTP Versions HTTP/2, HTTP/1.1, HTTP/1.0
IPV6 Enabled

CloudFront Reports & analytics Cache statistics Monitoring Alarms Popular objects Top referrers Usage Viewers Security Origin access identity Public key Field-level encryption





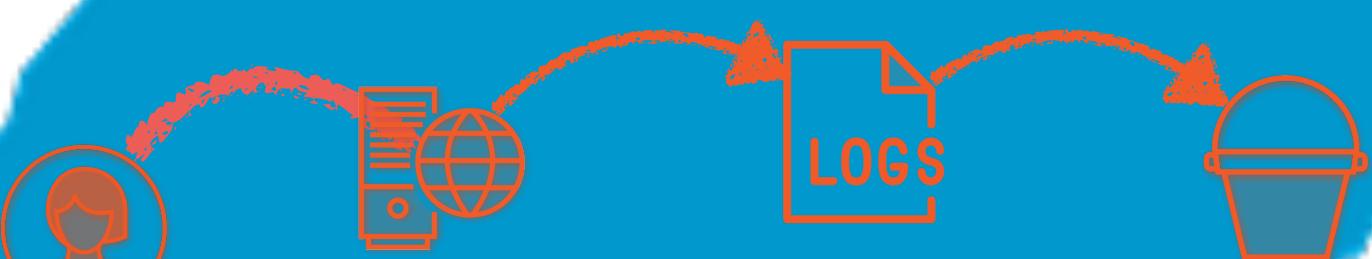






LOGS





CloudFront Logs



Each log entry = A single request

CloudFront Logs



CloudFront Logs



CloudFront Logs



W3C extended log file format

CloudFront Logs



W3C extended log file format



|

|

CloudFront Logs



W3C extended log file format



Tab-separated

CloudFront Logs



W3C extended log file format



Tab-separated



CloudFront Logs



W3C extended log file format



Tab-separated



Not in chronological order

CloudFront Logs



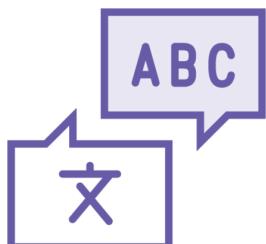
W3C extended log file format



Tab-separated



Not in chronological order



CloudFront Logs



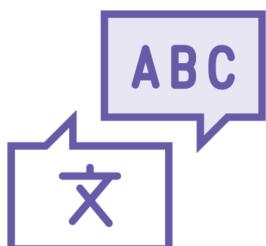
W3C extended log file format



Tab-separated



Not in chronological order



URL-encoded equivalents

CloudFront Log Headers

File-format version

W3C field names

```
#Version: 1.0
#Fields: date time x-edge-location sc-bytes c-ip cs-method cs(Host) cs-
uri-stem sc-status cs(Referer) cs(User-Agent) cs-uri-query cs(Cookie)
x-edge-result-type x-edge-request-id x-host-header cs-protocol cs-bytes
time-taken x-forwarded-for ssl-protocol ssl-cipher x-edge-response-
result-type cs-protocol-version fle-status fle-encrypted-fields
```

CloudFront Log Headers

Line 1: File-format version

Line 2: Lists the W3C fields included in each record

Fields: date

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: time

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: x-edge-location

```
2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -
```

Fields: x-edge-location

```
2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -
```

Fields: sc-bytes

2019-05-23 01:13:12 LAX1 **2390282** 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: c-ip

2019-05-23 01:13:12 LAX1 2390282 **192.0.2.202** GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: cs-method

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: cs(Host)

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: cs-uri-stem

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: sc-status

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: cs(Referer)

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: cs(User-Agent)

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: cs-uri-query

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) **a=b&c=d** zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: cs(Cookie)

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d **zip=50158** Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: x-edge-result-type

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: x-edge-request-id

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: x-host-header

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: cs-protocol

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: cs-bytes

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: time-taken

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: x-forwarded-for

```
2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -
```

Fields: ssl-protocol

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: *ssl-cipher*

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: x-edge-response-result-type

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - **Hit** HTTP/
1.1 - -

Fields: cs-protocol-version

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit **HTTP/**
1.1 - -

Fields: fle-status

2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -

Fields: fle-encrypted-fields

```
2019-05-23 01:13:12 LAX1 2390282 192.0.2.202 GET
d11111abcdef8.cloudfront.net /soundtrack/happy.mp3 304
www.unknownsingers.com Mozilla/4.0%20(compatible;
%20MSIE%207.0;%20Windows%20NT%205.1) a=b&c=d zip=50158 Hit
xGN7KWpVEmB9Dp7ctcVFQC4E-nrc0cEKS3QyAez--06dV7TEXAMPLE==
d11111abcdef8.cloudfront.net http - 0.002 - - - Hit HTTP/
1.1 - -
```

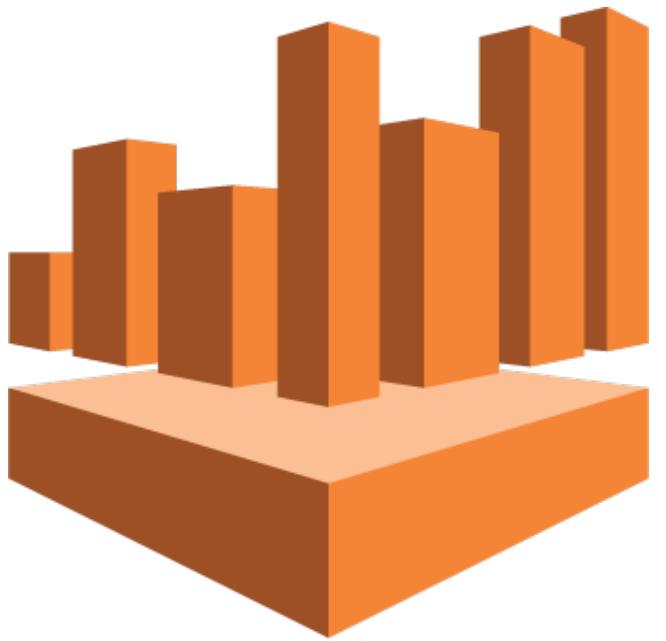
`bucketname.s3.amazonaws.com
/prefix/distribution-ID.YYYY-MM-DD-HH.unique-ID.gz`

CloudFront Log File Name

Customer: Bucket name & Prefix

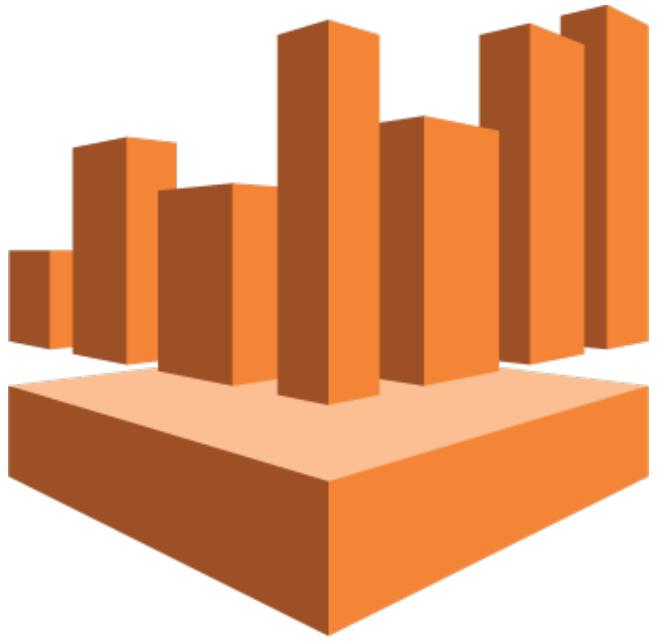
AWS: Filename & Gzip

Log Shipping



Amazon Athena

Log Shipping



Amazon Athena



Elasticsearch

Summary

Summary

Summary

CloudFront Logging

Summary

CloudFront Logging

- Configured Delivery

Summary

CloudFront Logging

- Configured Delivery
- Delivery of Logs

Summary

CloudFront Logging

- Configured Delivery
- Delivery of Logs
- Log Format

Monitoring & Alerting



Andy Dyracz
CLOUD ARCHITECT
@adyracz

Summary

Summary

Summary

Alerting

Summary

Alerting

- Send email based on metrics

Summary

Alerting

- Send email based on metrics

Monitoring

Summary

Alerting

- Send email based on metrics

Monitoring

- Use CloudWatch metrics for alerting

Simple Notification Service X +

https://console.aws.amazon.com/sns/v3/home?region=us-east-1#/subscription/arn:aws:sns:us-east-1:35

Services Resource Groups

Amazon SNS

Topics Subscriptions

Mobile Push notifications Text messaging (SMS)

Subscription: 1e026c3d-5ab1-4719-b7fb-f390aacf0498

Edit Delete

Details

| | | | |
|----------|---|----------|-----------|
| ARN | arn:aws:sns:us-east-1:359659591268:PS_Alerts:1e026c3d-5ab1-4719-b7fb-f390aacf0498 | Status | Confirmed |
| Endpoint | adycrz+ps@gmail.com | Protocol | EMAIL |
| Topic | PS_Alerts | | |

Subscription filter policy

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CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#cw:dashboard=Home

durst N. Virginia Support

aws Services Resource Groups

CloudWatch Dashboards TheEvent Alarms ALARM 0 INSUFFICIENT 0 OK 1 Billing Events Rules Event Buses Logs Insights Metrics Settings Favorites + Add a dashboard

CloudWatch: Overview ▾ All resources

Time range 1h 3h 12h 1d 3d 1w custom ▾ Actions ▾

CloudWatch: Overview ▾ All resources

Alarms by AWS service ⓘ

| Services | Status | Alarm | Insufficient | OK |
|-----------------------------|--------|-------|--------------|----|
| CloudFront | ✓ | - | - | 1 |
| Simple Notification Service | ? | - | - | - |

Recent alarms ⓘ

TheEvent - CloudW... ✓

Percent

0.1 5xxErrorRate > 0.1 for 1 ...

0.05

0

02:11 05:11

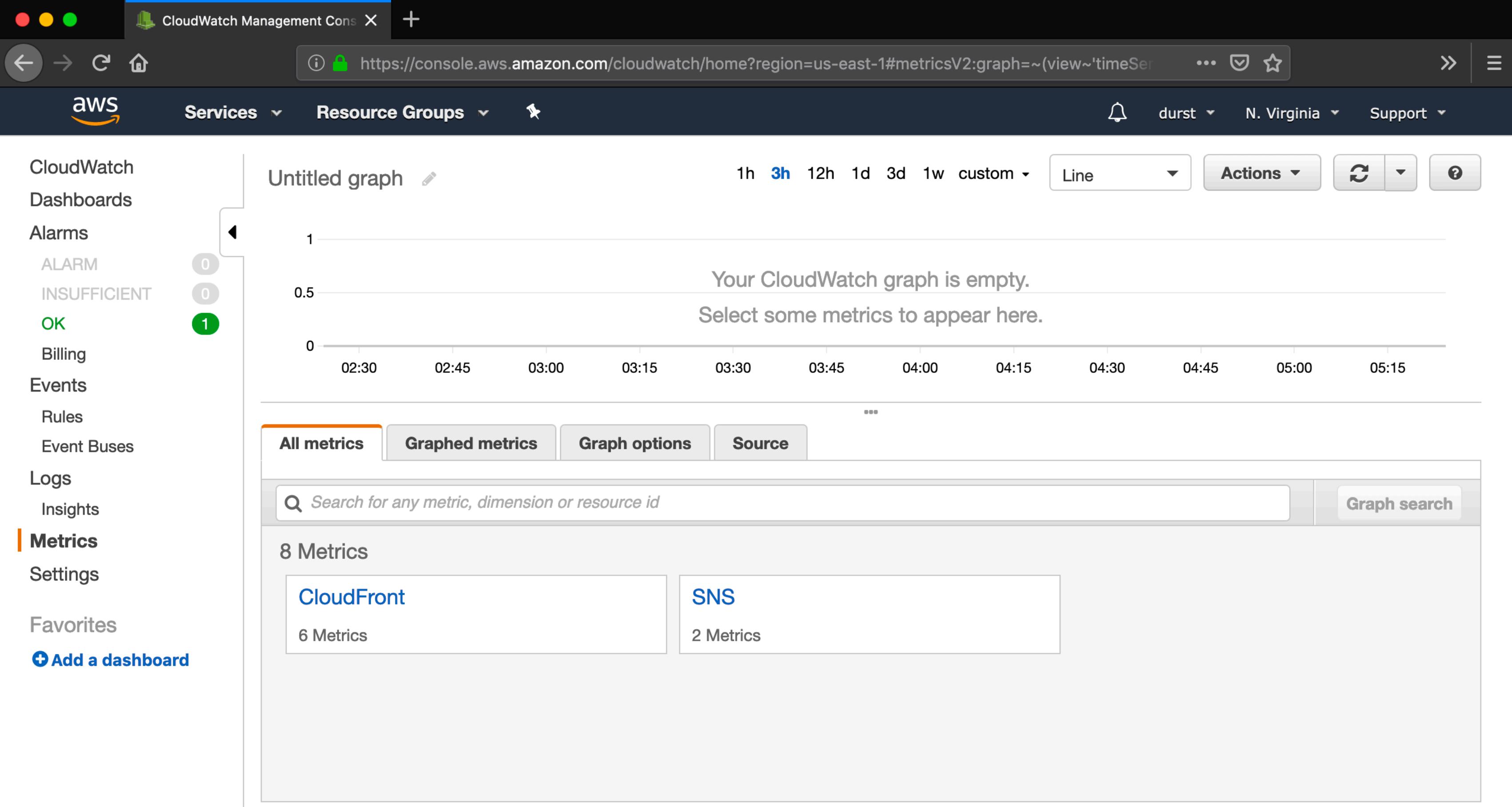
5xxErrorRate

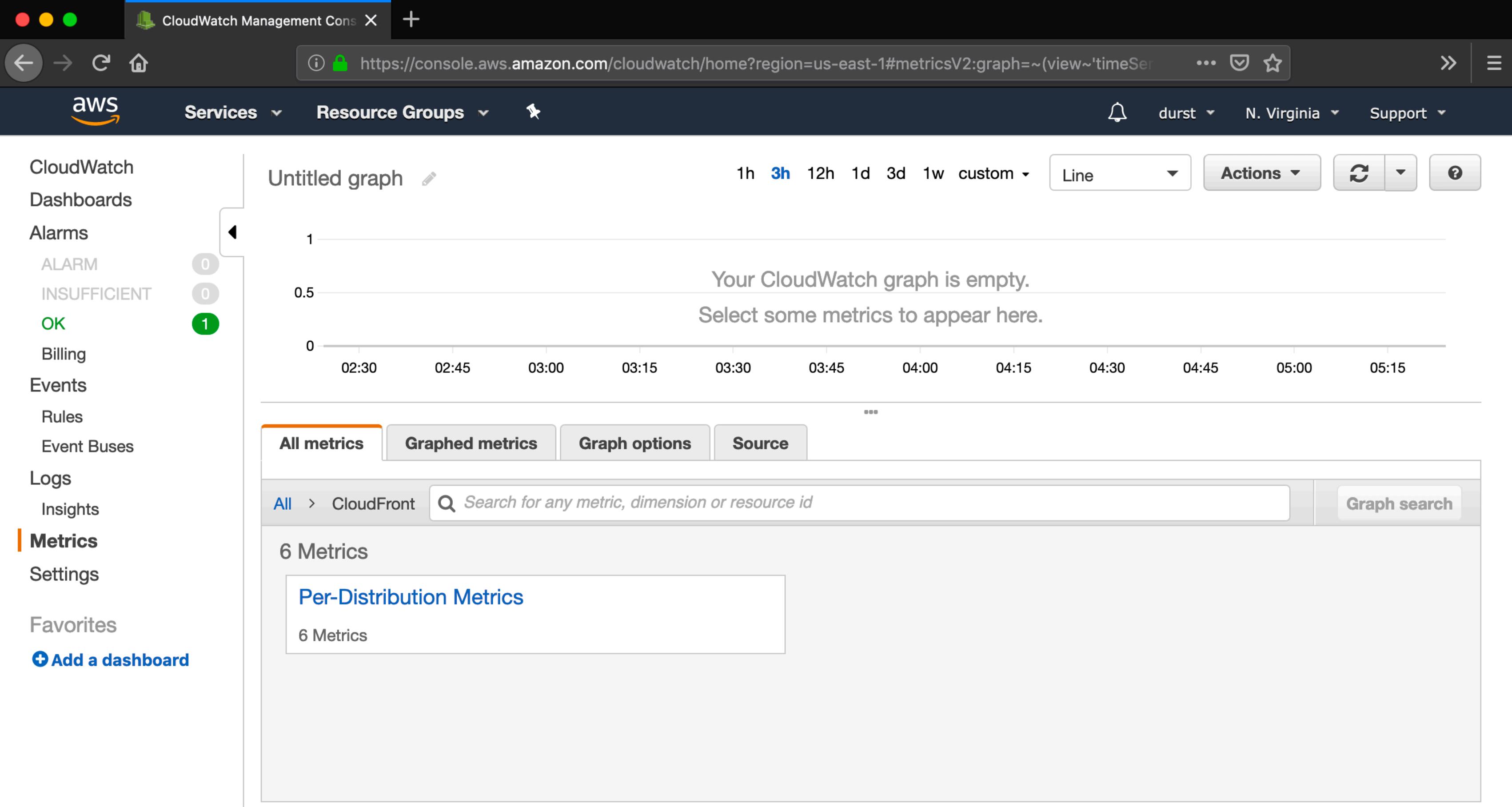
Default dashboard ⓘ

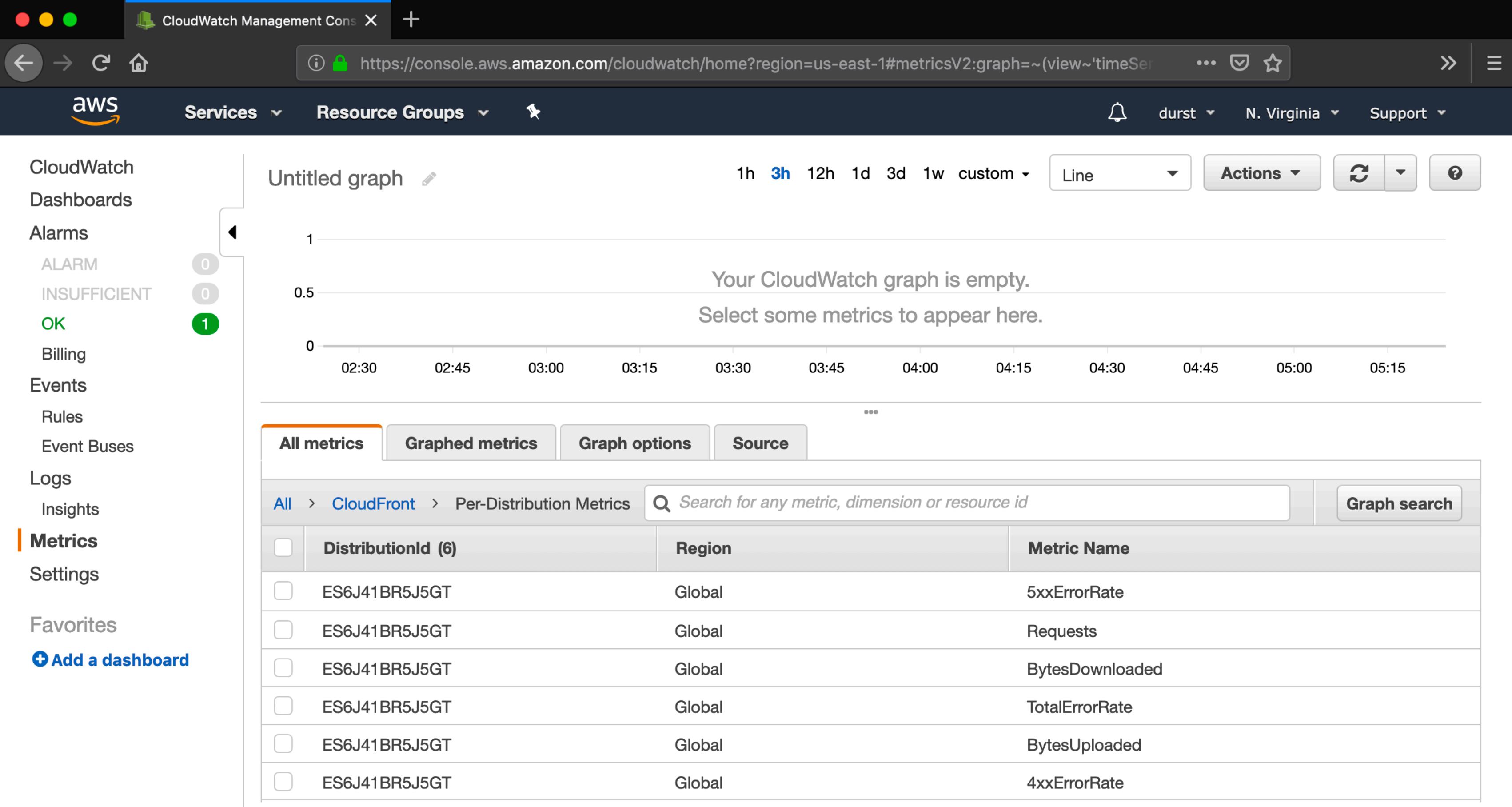
Name any CloudWatch dashboard **CloudWatch-Default** to display it here. [Create a new CloudWatch-Default dashboard](#)

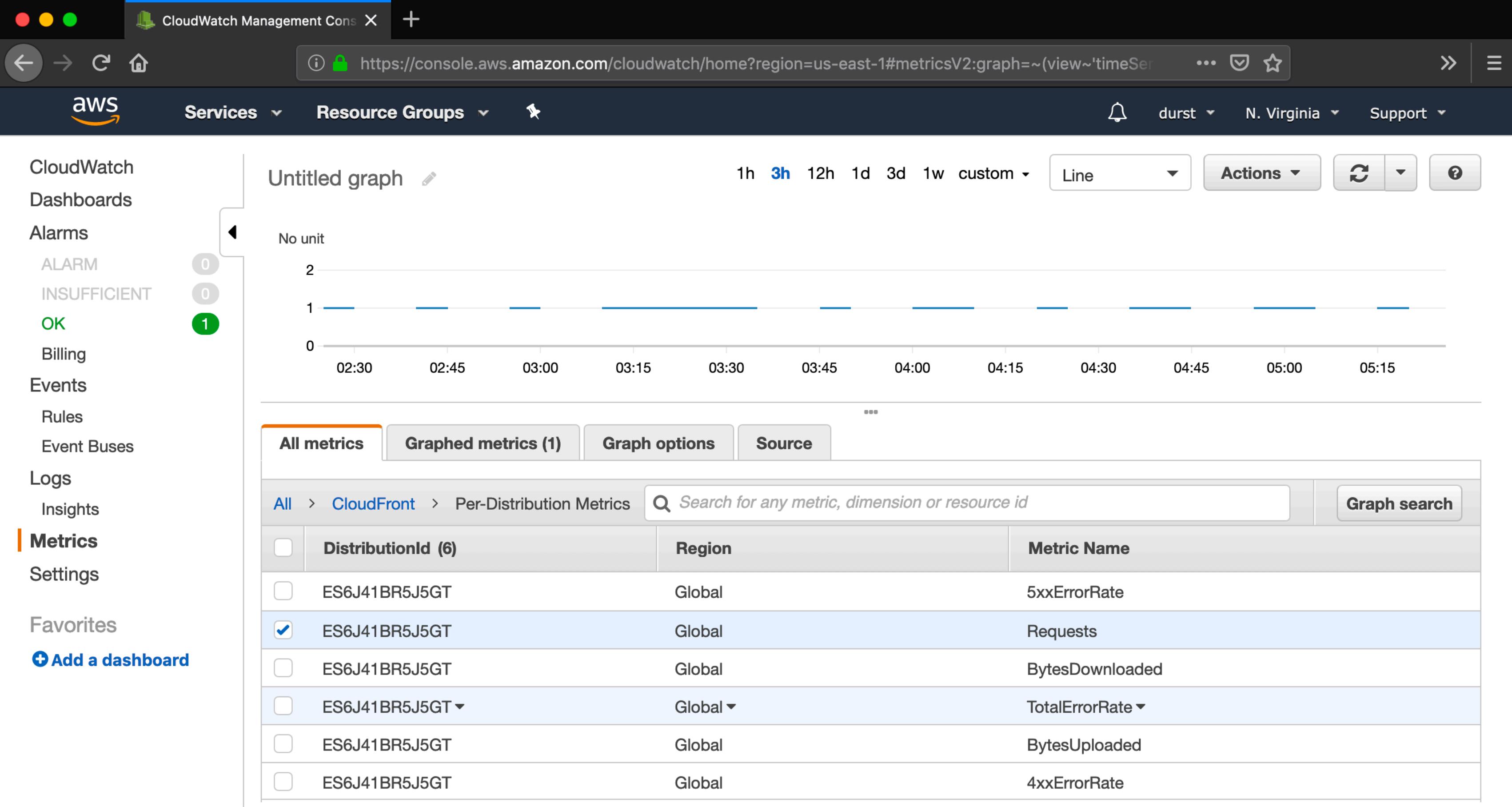
Cross service dashboard ⓘ

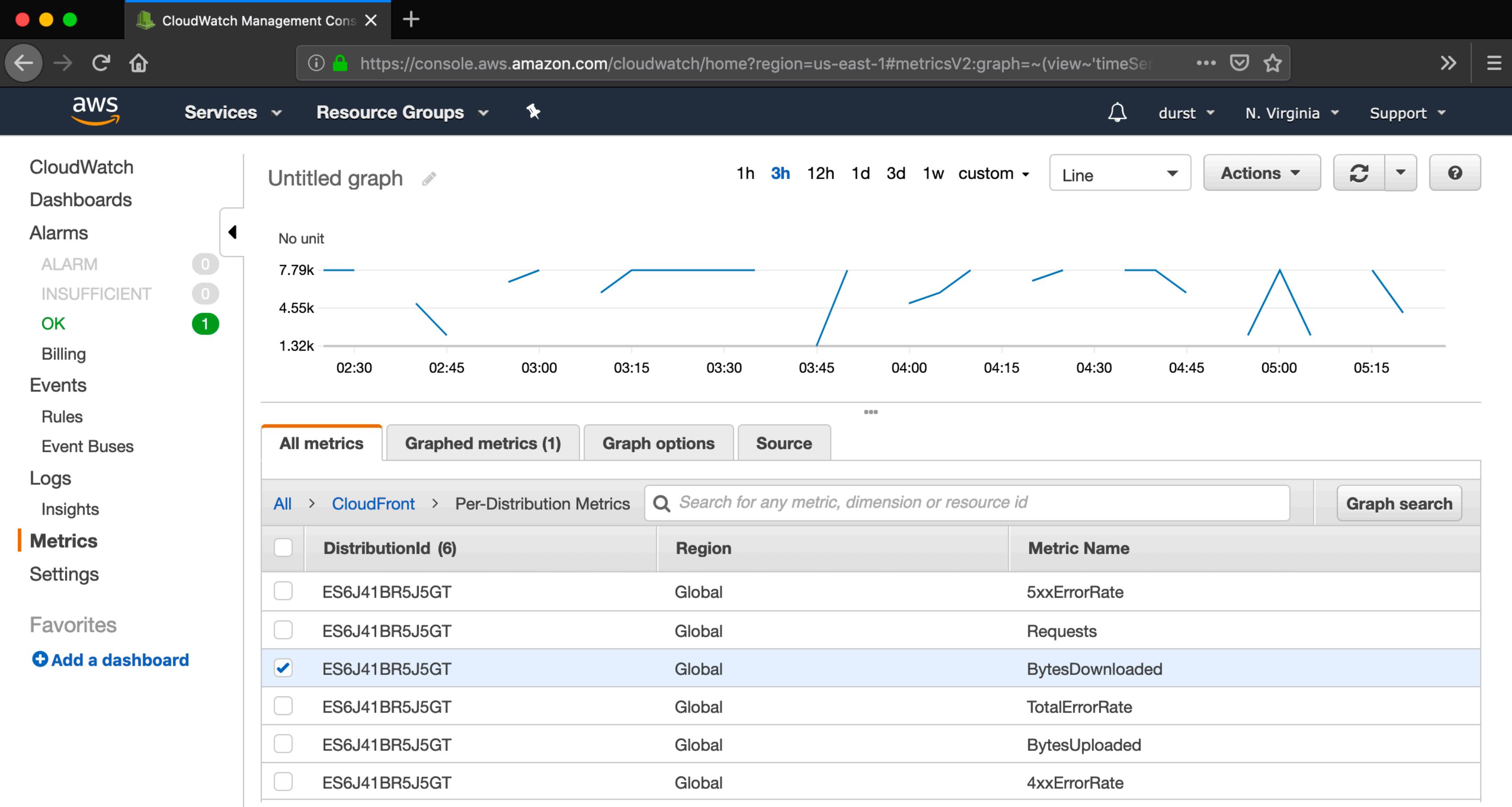
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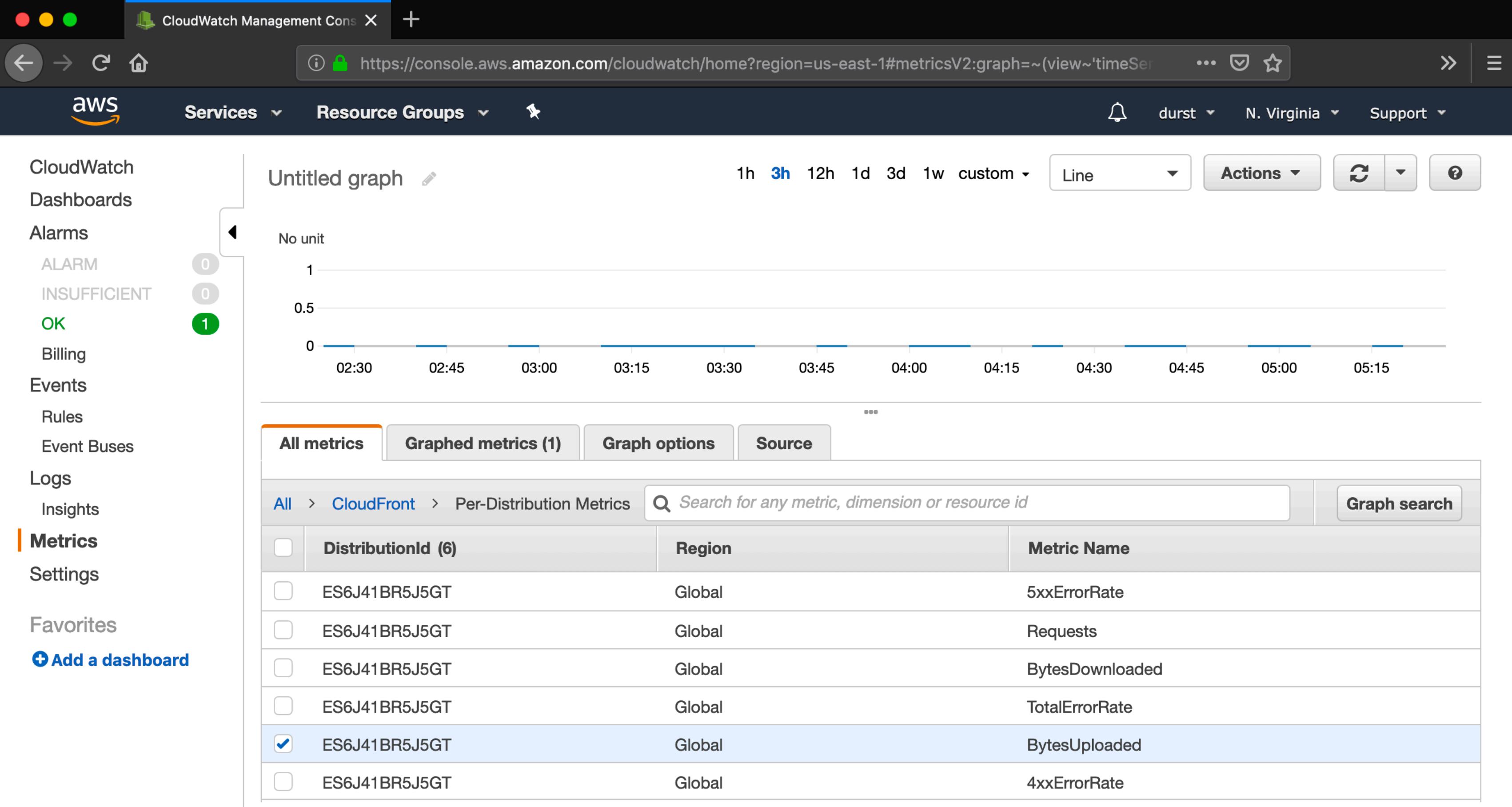


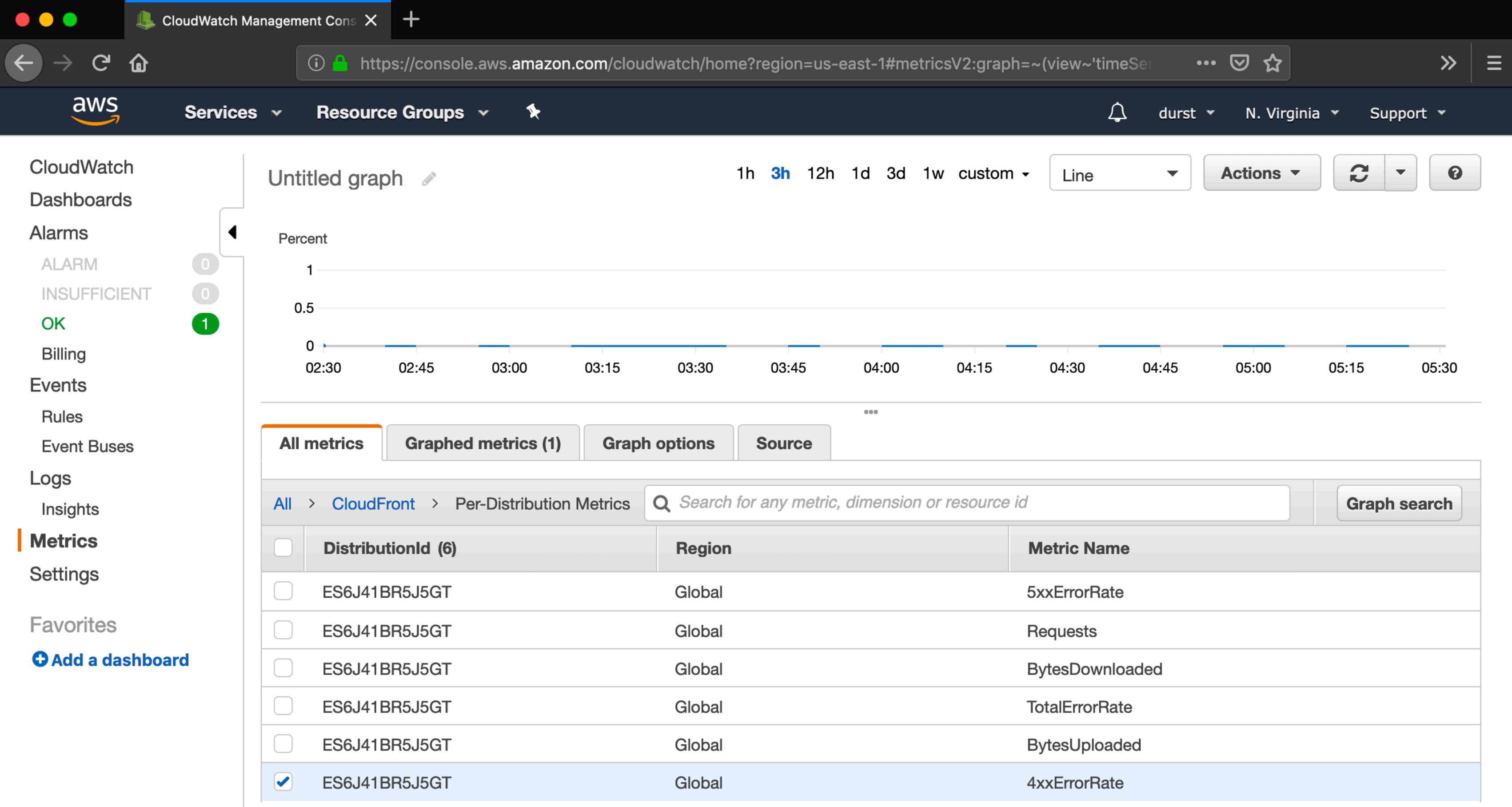


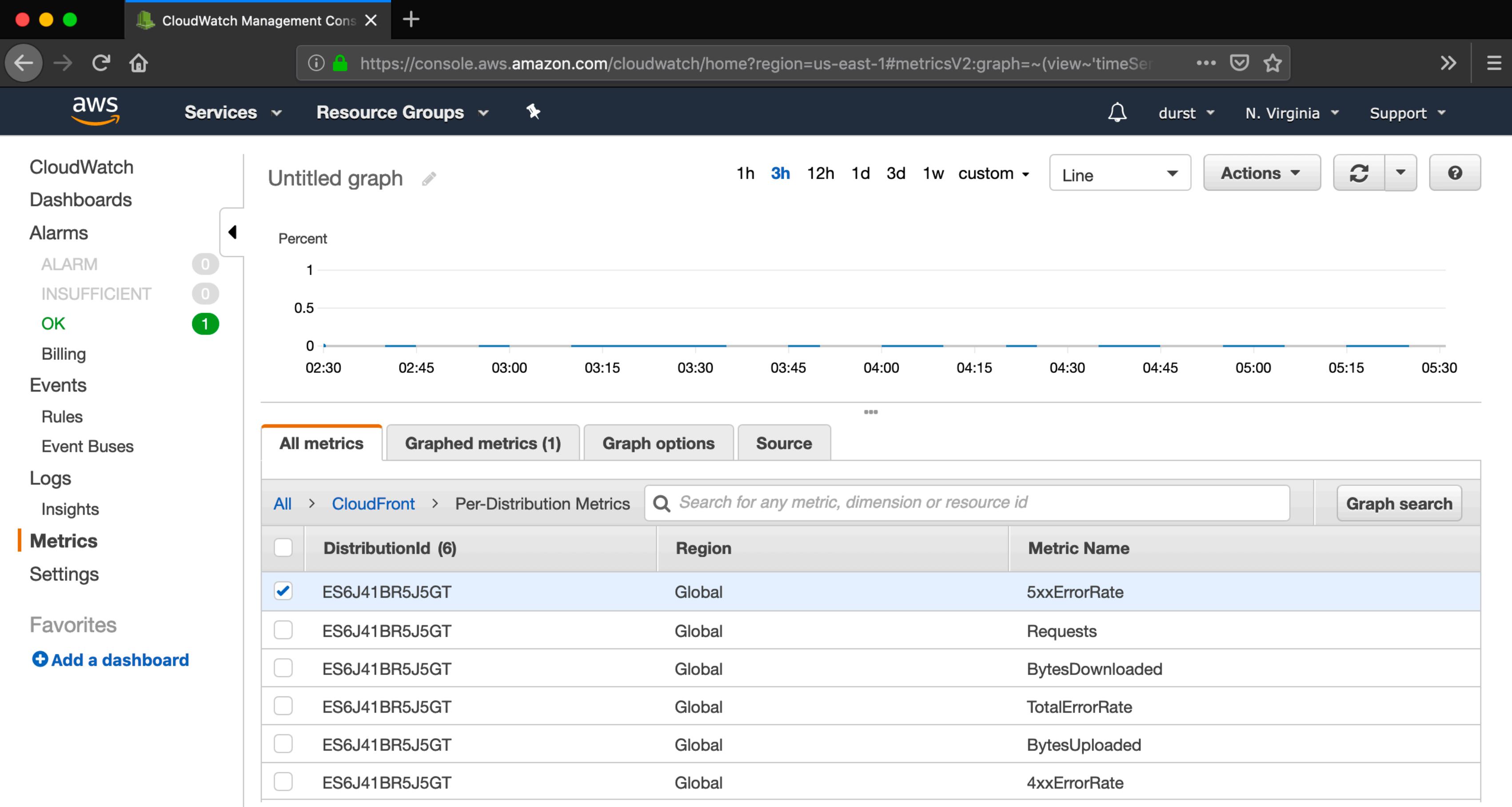


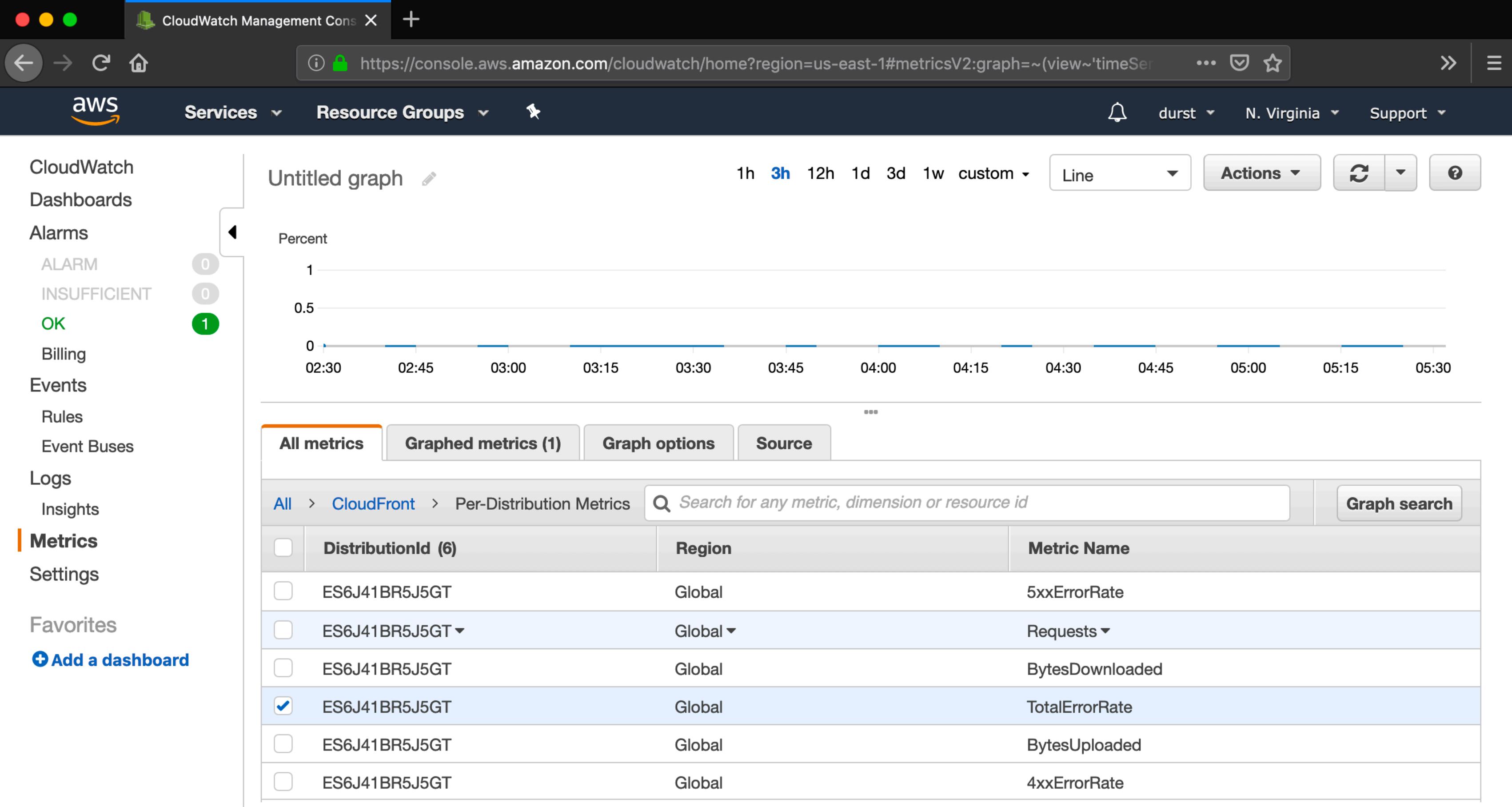












AWS CloudFront Management X +

https://console.aws.amazon.com/cloudfront/home?region=us-east-1

Services ▾ Resource Groups ▾

CloudFront

Distributions

What's new *

Reports & analytics

- Cache statistics
- Monitoring
- Alarms
- Popular objects
- Top referrers
- Usage
- Viewers

Security

- Origin access identity
- Public key
- Field-level encryption

CloudFront Distributions

Create Distribution Distribution Settings Delete Enable Disable

Viewing : Any Delivery Method Any State

| | Delivery Method | ID | Domain Name | Comment | Origin | CNAMEs | Status |
|--------------------------|-----------------|---------------|-------------------------------|---------|------------|-------------|----------|
| <input type="checkbox"/> | Web | ES6J41BR5J5GT | d2ee8i73kfyy7w.cloudfront.net | - | pluralsigh | www.dyrcz.r | Deployed |

AWS CloudFront Management

https://console.aws.amazon.com/cloudfront/home?region=us-east-1

CloudFront Distributions

Create Distribution Distribution Settings Delete Enable Disable

Viewing : Any Delivery Method Any State

| | Delivery Method | ID | Domain Name | Comment | Origin | CNAMEs | Status |
|--------------------------|-----------------|---------------|-------------------------------|---------|------------|-------------|----------|
| <input type="checkbox"/> | Web | ES6J41BR5J5GT | d2ee8i73kfyy7w.cloudfront.net | - | pluralsigh | www.dyrcz.r | Deployed |

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AWS CloudFront Management

https://console.aws.amazon.com/cloudfront/home?region=us-east-1

CloudFront Distributions

Create Distribution Distribution Settings Delete Enable Disable

Viewing : Any Delivery Method Any State

| | Delivery Method | ID | Domain Name | Comment | Origin | CNAMEs | Status |
|--------------------------|-----------------|---------------|-------------------------------|---------|------------|-------------|----------|
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Distributions

What's new *

Reports & analytics

Cache statistics

Monitoring

Alarms

Popular objects

Top referrers

Usage

Viewers

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Origin access identity

Public key

Field-level encryption

CloudFront

https://console.aws.amazon.com/cloudfront/v2/home?#/monitoring

durst Global Support

CloudFront Distributions What's new Reports & analytics Cache statistics Monitoring Alarms Popular objects Top referrers Usage Viewers Security Origin access identity Public key Field-level encryption

CloudFront > Monitoring

Monitoring

Distributions (1)

Choose a distribution, and then choose View distribution metrics to see charts with detailed metrics.

[View distribution metrics](#)

Search distributions

| | Distribution ID | Comment | CNAME | Origin or Origin group |
|--|-----------------|---------|--------------|------------------------|
| | ES6J41BR5J5GT | - | www.dyrcz.me | TheEvent-ELBOrigin |

Lambda@Edge functions (0)

The following Lambda@Edge functions are associated with one of your CloudFront distributions.

Search Lambda@Edge functions

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CloudFront

https://console.aws.amazon.com/cloudfront/v2/home?#/monitoring

aws Services Resource Groups CloudFront CloudFront Monitoring Monitoring Info

Distributions What's new Reports & analytics Cache statistics Monitoring Alarms Popular objects Top referrers Usage Viewers Security Origin access identity Public key Field-level encryption

CloudFront > Monitoring

Monitoring

Distributions (1)

Choose a distribution, and then choose View distribution metrics to see charts with detailed metrics.

View distribution metrics

Search distributions

< 1 > |

| Distribution ID | Comment | CNAME | Origin or Origin group |
|-----------------|---------|--------------|------------------------|
| ES6J41BR5J5GT | - | www.dyrcz.me | TheEvent-ELBOrigin |

Lambda@Edge functions (0)

The following Lambda@Edge functions are associated with one of your CloudFront distributions.

View function metrics

Search Lambda@Edge functions

< 1 > |

CloudFront

https://console.aws.amazon.com/cloudfront/v2/home?#monitoring/ES6J41BR5J5GT

aws Services Resource Groups CloudFront durst Global Support

CloudFront

ES6J41BR5J5GT

Distributions

What's new

Reports & analytics

Cache statistics

Monitoring

Alarms

Popular objects

Top referrers

Usage

Viewers

Security

Origin access identity

Public key

Field-level encryption

CloudFront > Monitoring > ES6J41BR5J5GT

Overview Lambda@Edge errors

The following charts show the metrics for a distribution so that you can monitor your content delivery on Amazon CloudFront. [Info](#)

Add to dashboard 1h 3h 12h 1d 3d 1w custom ▾

Download CSV ▾

Requests (sum)

Data transfer

7.79k

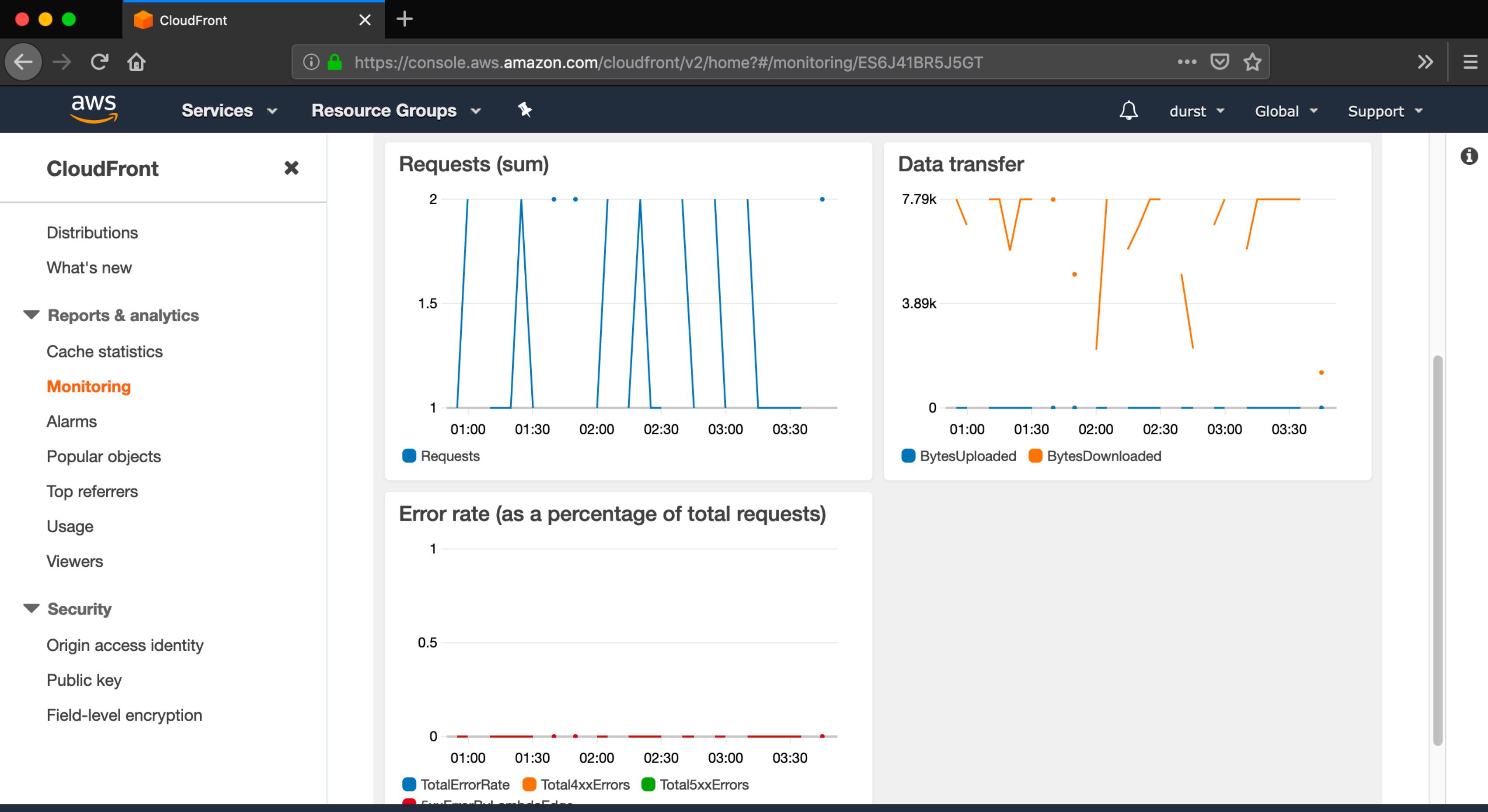
3.89k

0

01:00 01:30 02:00 02:30 03:00 03:30

BytesUploaded BytesDownloaded

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CloudFront

https://console.aws.amazon.com/cloudfront/v2/home?#monitoring/ES6J41BR5J5GT

aws Services Resource Groups CloudFront durst Global Support

CloudFront

ES6J41BR5J5GT

Distributions

What's new

Reports & analytics

Cache statistics

Monitoring

Alarms

Popular objects

Top referrers

Usage

Viewers

Security

Origin access identity

Public key

Field-level encryption

CloudFront > Monitoring > ES6J41BR5J5GT

Overview Lambda@Edge errors

The following charts show the metrics for a distribution so that you can monitor your content delivery on Amazon CloudFront. [Info](#)

Add to dashboard 1h 3h 12h 1d 3d 1w custom ▾

Download CSV ▾

Requests (sum)

Data transfer

7.79k

3.89k

0

01:00 01:30 02:00 02:30 03:00 03:30

BytesUploaded BytesDownloaded

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CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:

Services ▾ Resource Groups ▾ ⚙ durst ▾ N. Virginia ▾ Support ▾

CloudWatch Dashboards TheEvent Alarms ALARM 0 INSUFFICIENT 0 OK 0 Billing Events Rules Event Buses Logs Insights Metrics Settings Favorites + Add a dashboard

CloudWatch > Alarms

Alarms (0) ⟳ Add to dashboard Action ▾ Create alarm

Search Any state < 1 > ⚙

| | Name | State | Conditions | Actions status |
|-----------|------|-------|------------|----------------|
| No alarms | | | | |

CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create

Services Resource Groups

CloudWatch Alarms Create alarm

Step 1 Specify metric and conditions

Step 2 Configure actions

Step 3 Add a description

Step 4 Preview and create

Metric

Graph

Preview of the metric or metric expression and the alarm threshold.

Select metric

Cancel Next

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CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create

aws Services Resource Groups

Select metric

Untitled graph

1
0.5
0

01:30 01:45 02:00 02:15 02:30 02:45 03:00 03:15 03:30 03:45 04:00 04:15

Your CloudWatch graph is empty.
Select some metrics to appear here.

All metrics Graphed metrics Graph options Source

Search for any metric, dimension or resource id

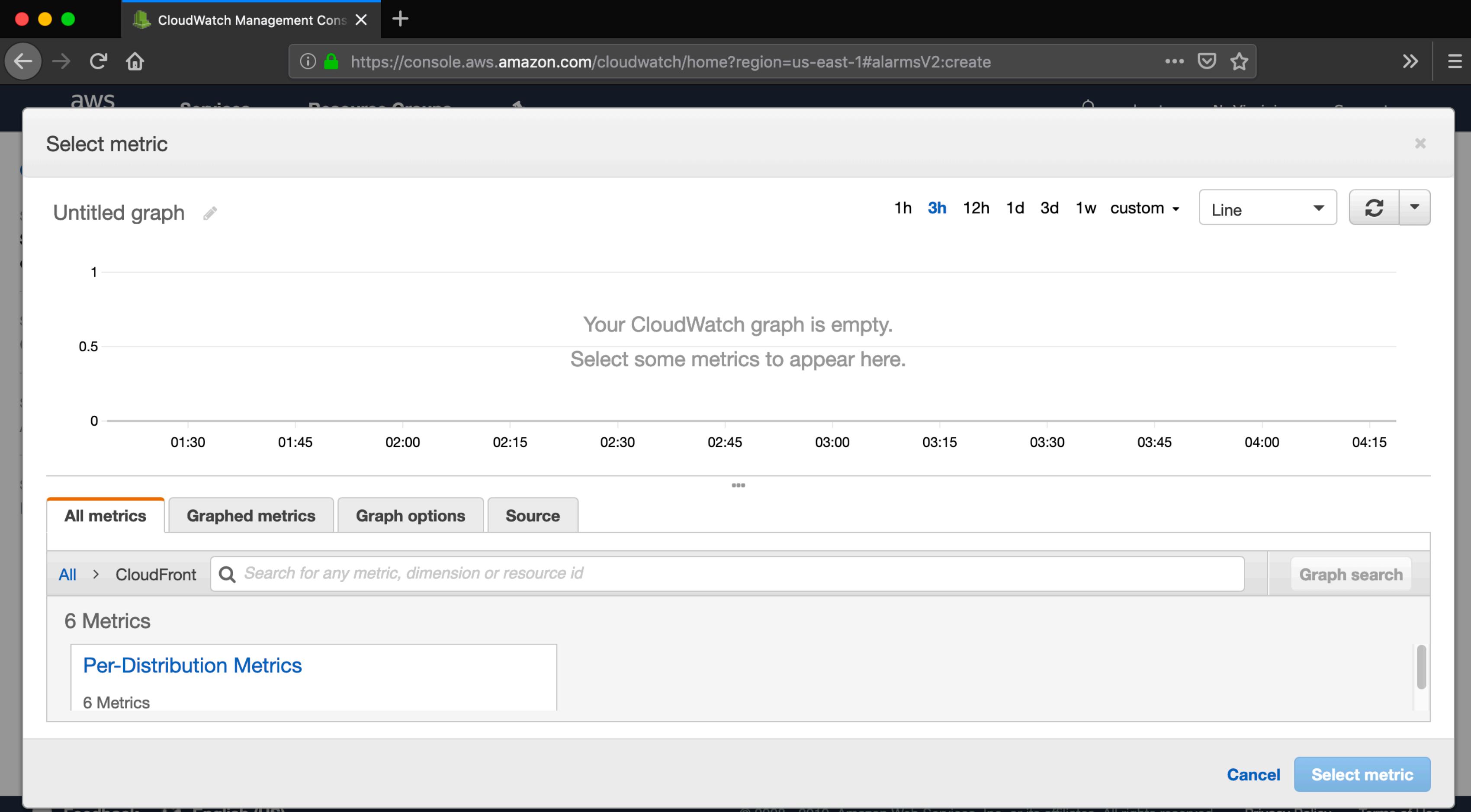
8 Metrics

CloudFront SNS

6 Metrics 2 Metrics

Cancel Select metric

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CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create

AWS Services Resource Groups

Select metric

Untitled graph 

Percent

1
0.5
0

01:15 01:30 01:45 02:00 02:15 02:30 02:45 03:00 03:15 03:30 03:45 04:00 04:15

 5xxErrorRate

1h 3h 12h 1d 3d 1w custom ▾ Line  

All metrics Graphed metrics (1) Graph options Source 

All > CloudFront > Per-Distribution Metrics Graph search

| <input type="checkbox"/> | DistributionId (6) | Region | Metric Name |
|-------------------------------------|--------------------|--------|----------------|
| <input type="checkbox"/> | ES6J41BR5J5GT | Global | TotalErrorRate |
| <input checked="" type="checkbox"/> | ES6J41BR5J5GT | Global | 5xxErrorRate |

Cancel **Select metric**

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CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create

Services Resource Groups

CloudWatch Alarms Create alarm

Step 1 Specify metric and conditions

Step 2 Configure actions

Step 3 Add a description

Step 4 Preview and create

Metric

Graph

This alarm will trigger when the blue line goes above the red line for 1 datapoints within 5 minutes

Percent

1
0.8
0.6
0.4
0.2
0

02:00 03:00 04:00

5xxErrorRate

Edit

Namespace AWS/CloudFront

Metric name 5xxErrorRate

Region Global

DistributionId ES6J41BR5J5GT

Statistic

| Time | 5xxErrorRate |
|-------|--------------|
| 02:00 | 0.02 |
| 03:00 | 0.00 |
| 04:00 | 0.00 |

CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create

durst N. Virginia Support

Step 4
Preview and create

0.8
0.6
0.4
0.2
0

02:00 03:00 04:00

5xxErrorRate

Metric name: 5xxErrorRate

Region: Global

DistributionId: ES6J41BR5J5GT

Statistic: Average

Period: 1 minute

Conditions:

Whenever 5xxErrorRate is... Define the alarm condition

Greater Greater/Equal

CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create

Services ▾ Resource Groups ▾ 🔍

durst ▾ N. Virginia ▾ Support ▾

Statistics

Average

Period

1 minute

Conditions

Whenever 5xxErrorRate is...

Define the alarm condition

Greater
> threshold

Greater/Equal
>= threshold

Lower/Equal
<= threshold

Lower
< threshold

than...

Define the threshold value

10000

Must be a number

▶ Additional configuration

Cancel Next

CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create

Services ▾ Resource Groups ▾ ⚙ durst ▾ N. Virginia ▾ Support ▾

Cloudwatch / Alarms / Create alarm

Step 1 Specify metric and conditions

Step 2 Configure actions

Step 3 Add a description

Step 4 Preview and create

Configure actions

Notification

Whenever this alarm state is... Define the alarm state that will trigger this action

in Alarm The metric or expression is outside of the defined threshold.

OK The metric or expression is within the defined threshold.

INSUFFICIENT_DATA The alarm has just started or not enough data is available.

Remove

Select an SNS topic Define the SNS (Simple Notification Service) topic that will receive the notification

Select an existing SNS topic

Create new topic

Use topic ARN

Send a notification to...

Only email lists for this account are available



Services ▾

Resource Groups ▾



durst ▾

N. Virginia ▾

Support ▾

Step 3

Add a description

Step 4

Preview and create

Whenever this alarm state is...

Define the alarm state that will trigger this action

[Remove](#) in Alarm

The metric or expression is outside of the defined threshold.

 OK

The metric or expression is within the defined threshold.

 INSUFFICIENT_DATA

The alarm has just started or not enough data is available.

Select an SNS topic

Define the SNS (Simple Notification Service) topic that will receive the notification

 Select an existing SNS topic Create new topic Use topic ARN

Send a notification to...

 PS_Alerts ×

Only email lists for this account are available

Email (endpoints)

adyrcz+ps@gmail.com - [View in SNS Console](#) ↗[Add notification](#)

Auto Scaling action



Services ▾

Resource Groups ▾



durst ▾

N. Virginia ▾

Support ▾



Only email lists for this account are available

Email (endpoints)

adyrcz+ps@gmail.com - [View in SNS Console](#)[Add notification](#)

Auto Scaling action

[Add Auto Scaling action](#)

EC2 action

This action is only available for EC2 Per-Instance Metrics

[Add EC2 action](#)[Cancel](#)[Previous](#)[Next](#)

CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create

Services Resource Groups

CloudWatch Alarms Create alarm

Step 1 Specify metric and conditions

Step 2 Configure actions

Step 3 Add a description

Step 4 Preview and create

Add a description

Name and description

Define a unique name

Alarm name

TheEvent - CloudWatch 5xxErrorRate

Alarm description - optional

Define a description for this alarm. Optionally you can also use markdown.

Alarm description

Up to 1024 characters (0/1024)

Cancel Previous Next

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Step 1

Specify metric and conditions

Step 2

Configure actions

Step 3

Add a description

Step 4

Preview and create

Preview and create

Step 1: Specify conditions

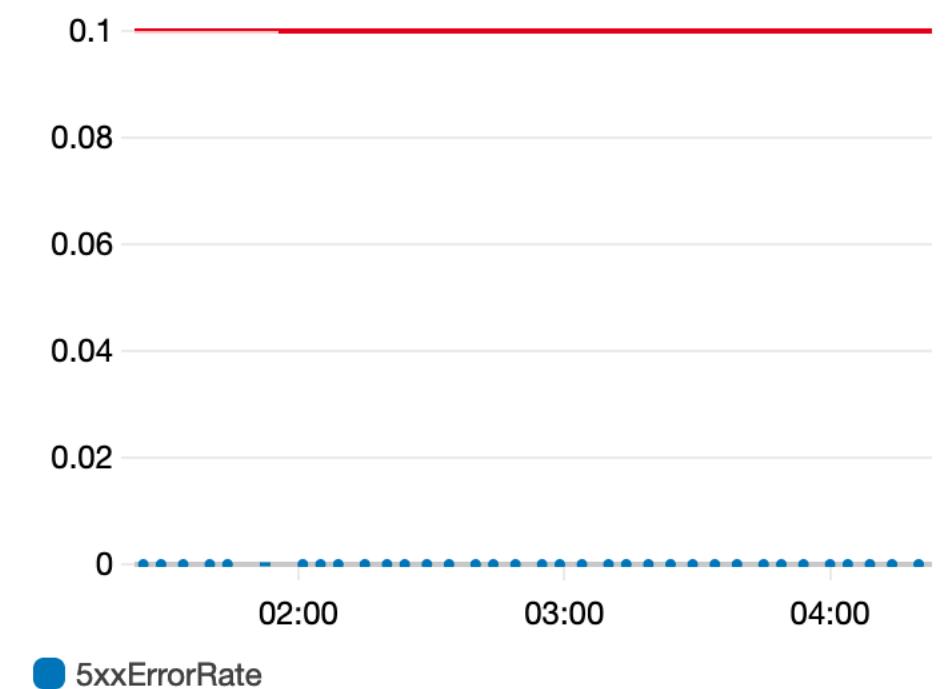
[Edit](#)

Metric

Graph

This alarm will trigger when the blue line goes above the red line for 1 datapoints within 1 minute

Percent



Namespace

AWS/CloudFront

Metric name

5xxErrorRate

Region

Global

DistributionId

ES6J41BR5J5GT

Statistic



Feedback



English (US)

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[Privacy Policy](#)[Terms of Use](#)



Services ▾

Resource Groups ▾



durst ▾

N. Virginia ▾

Support ▾

Period

1 minute

Conditions

Whenever **5xxErrorRate** is

Greater (>)

than...

0.1

► Additional configuration

Step 2: Configure actions

Edit

Actions

Notification

When in Alarm, send a notification
to "PS_Alerts"



Feedback



English (US)



Services ▾

Resource Groups ▾



durst ▾

N. Virginia ▾

Support ▾

ALARMS

Notification

When in Alarm, send a notification
to "PS_Alerts"

Step 3: Add a description

[Edit](#)

Name and description

| Name | Description |
|-----------------------|-------------|
| TheEvent - CloudWatch | |
| 5xxErrorRate | |

[Cancel](#)[Previous](#)[Create alarm](#)

Feedback



English (US)

CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:

Services ▾ Resource Groups ▾ ⚙ durst ▾ N. Virginia ▾ Support ▾

CloudWatch Dashboards TheEvent Alarms ALARM 0 INSUFFICIENT 0 OK 0 Billing Events Rules Event Buses Logs Insights Metrics Settings Favorites + Add a dashboard

Success
Successfully created alarm [TheEvent - CloudWatch 5xxErrorRate](#).

CloudWatch > Alarms

Alarms (1)

Search Any state < 1 >

| | Name | State | Conditions | Actions status |
|--------------------------|--|-------------------|---|----------------|
| <input type="checkbox"/> | TheEvent - CloudWatch 5xxErrorRate | Insufficient data | 5xxErrorRate > 0.1 for 1 datapoints within 1 minute | Valid |

CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:

Services ▾ Resource Groups ▾

durst ▾ N. Virginia ▾ Support ▾

CloudWatch Dashboards TheEvent Alarms ALARM 0 INSUFFICIENT 0 OK 1 Billing Events Rules Event Buses Logs Insights Metrics Settings Favorites + Add a dashboard

Success
Successfully created alarm [TheEvent - CloudWatch 5xxErrorRate](#).

CloudWatch > Alarms

Alarms (1)

Search Any state < 1 >

| | Name | State | Conditions | Actions status |
|--------------------------|--|-------|---|----------------|
| <input type="checkbox"/> | TheEvent - CloudWatch 5xxErrorRate | OK | 5xxErrorRate > 0.1 for 1 datapoints within 1 minute | Valid |

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Summary

Created Alarm

- if 5xxError Rate is greater than 0.1% of all requests, then notify me

Summary

Created Alarm

- if 5xxError Rate is greater than 0.1% of all requests, then notify me

Troubleshooting CloudFront



Andy Dyrucz
CLOUD ARCHITECT
@adyrucz

Woken up by the pager...



AWS CloudFront Management

https://console.aws.amazon.com/cloudfront/home?region=us-east-1

CloudFront Distributions

Create Distribution Distribution Settings Delete Enable Disable

Viewing : Any Delivery Method Any State

| | Delivery Method | ID | Domain Name | Comment | Origin | CNAMEs | Status |
|--------------------------|-----------------|---------------|-------------------------------|---------|------------|-------------|----------|
| <input type="checkbox"/> | Web | ES6J41BR5J5GT | d2ee8i73kfyy7w.cloudfront.net | - | pluralsigh | www.dyrcz.r | Deployed |

Distributions

What's new *

Reports & analytics

- Cache statistics
- Monitoring
- Alarms
- Popular objects
- Top referrers
- Usage
- Viewers

Security

- Origin access identity
- Public key
- Field-level encryption

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AWS CloudFront Management

https://console.aws.amazon.com/cloudfront/home?region=us-east-1#alarms:

CloudFront Alarms From CloudWatch

Create Alarm

Alarming is billed at standard CloudWatch rates.

| State | Alarm Name | More Options |
|--|------------------------------------|------------------------------------|
| ⚠ Alarm | TheEvent - CloudWatch 5xxErrorRate | View in CloudWatch |

Viewing 1 to 1 of 1 Items

CloudFront

Distributions

What's new *

Reports & analytics

Cache statistics

Monitoring

Alarms

Popular objects

Top referrers

Usage

Viewers

Security

Origin access identity

Public key

Field-level encryption

durst

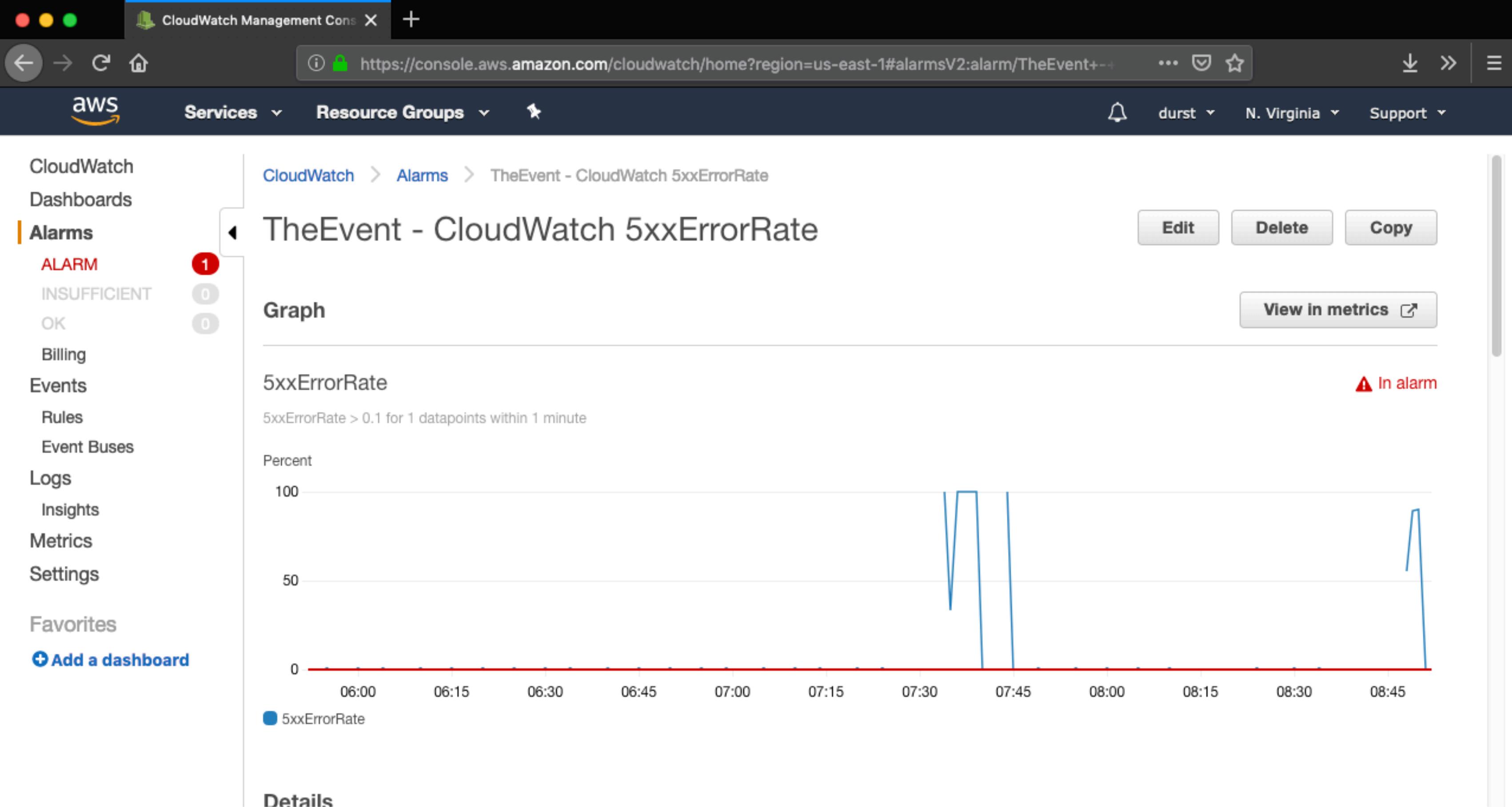
Global

Support

Feedback English (US)

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CloudWatch Management Cons X +

https://console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:alarm/TheEvent+-+

durst N. Virginia Support

CloudWatch

Alarms

ALARM 1

INSUFFICIENT 0

OK 0

Billing

Events

Rules

Event Buses

Logs

Insights

Metrics

Settings

Favorites

+ Add a dashboard

Details

| | | | |
|---|--|----------------|---------------------------------------|
| Name | Threshold | Namespace | Datapoints to alarm |
| TheEvent - CloudWatch 5xxErrorRate | 5xxErrorRate > 0.1 for 1 datapoints within 1 minute | AWS/CloudFront | 1 out of 1 |
| Description | Last change | Metric name | Missing data treatment |
| No description | 2019-06-23 08:58:34 | 5xxErrorRate | Treat missing data as missing |
| State | ARN | Region | Percentiles with low samples evaluate |
| ⚠ In alarm | arn:aws:cloudwatch:us-east-1:359659591268:alarm:TheEvent - CloudWatch 5xxErrorRate | Global | |
| | | DistributionId | |
| | | ES6J41BR5J5GT | |
| | | Statistic | |
| | | Average | |
| | | Period | |
| | | 1 minute | |

504 ERROR

The request could not be satisfied.

CloudFront attempted to establish a connection with the origin, but either the attempt failed or the origin closed the connection.

If you received this error while trying to use an app or access a website, please contact the provider or website owner for assistance.

If you provide content to customers through CloudFront, you can find steps to troubleshoot and help prevent this error by following steps in the CloudFront documentation

(<https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/http-504-gateway-timeout.html>).

Generated by cloudfront (CloudFront)

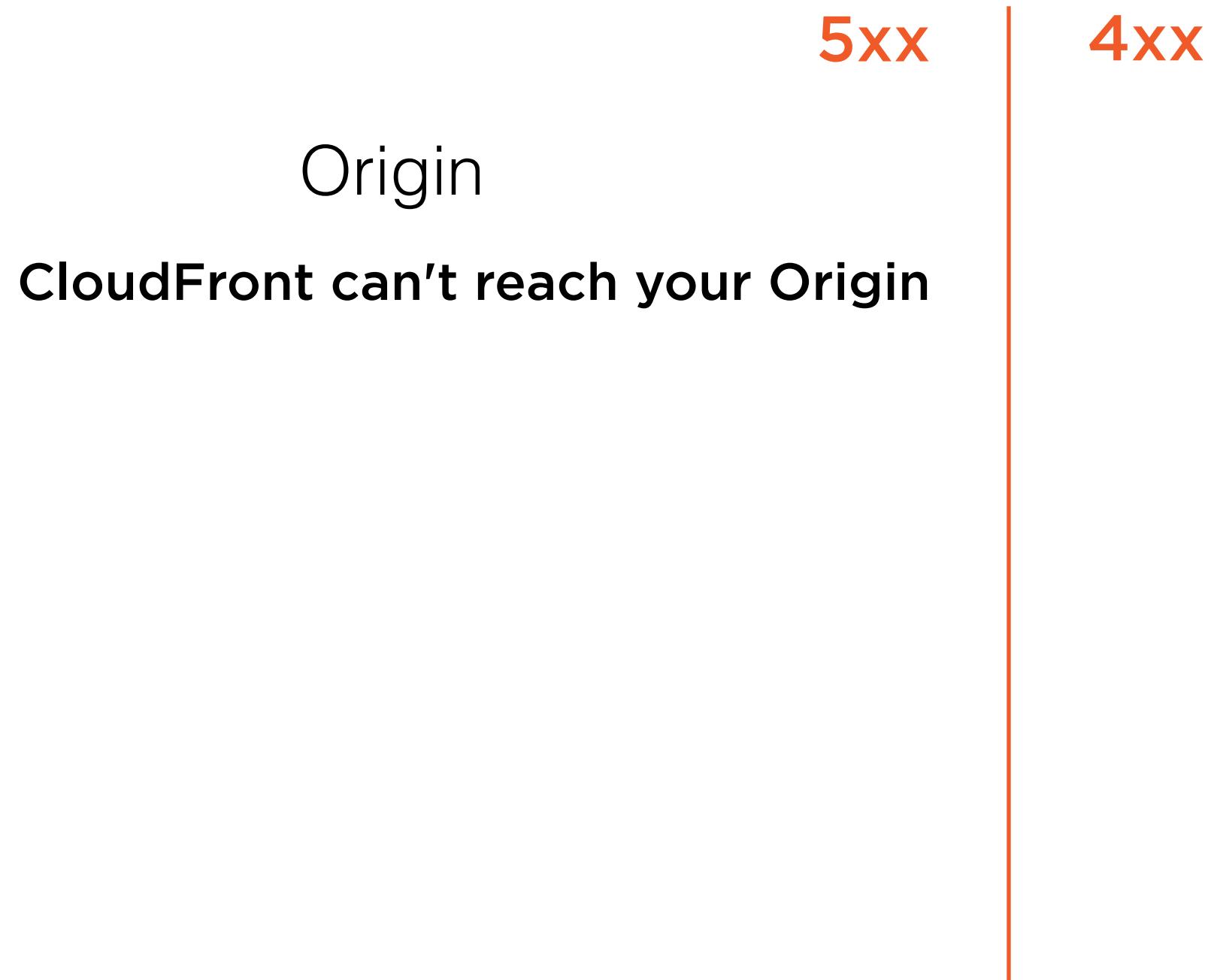
Request ID: _S338DUqj9PPGyj1TLGaeUCvzn9z4mML8VqkoLb7qpKjes5Y1szirw==

Location of problem

5xx | **4xx**



Location of problem



Location of problem



Athena

https://us-east-1.console.aws.amazon.com/athena/home?force®ion=us-east-1#query/history/13d

AWS Services Resource Groups

Athena Query Editor Saved Queries History AWS Glue Data Catalog Workgroup : primary Settings Tutorial Help What's new 10+

Database default

Filter tables and views...

Tables (1)

- cloudfront_logs
 - date (date)
 - time (string)
 - location (string)
 - bytes (bigint)
 - request_ip (string)
 - method (string)
 - host (string)
 - uri (string)
 - status (int)
 - referrer (string)
 - user_agent (string)
 - query_string (string)
 - cookie (string)
 - result_type (string)
 - request_id (string)
 - host_header (string)
 - request_protocol (string)

Create table

New query 1

```
1 SELECT DISTINCT *
2 FROM cloudfront_logs
3 WHERE "status" = 504
4 LIMIT 100;
```

Run query Save as Create (Run time: 3.14 seconds, Data scanned: 53.91 KB) Format query Clear

Use Ctrl + Enter to run query, Ctrl + Space to autocomplete

Results

| date | time | location | bytes | request_ip | method | host | uri | status | referrer |
|------|------|----------|-------|------------|--------|------|-----|--------|----------|
|------|------|----------|-------|------------|--------|------|-----|--------|----------|

cookie (string)
result_type (string)
request_id (string)
host_header (string)
request_protocol (string)

Views (0)[Create view](#)

You have not created any views. To create a view, run a query and click "Create view from query"

Results

| | date | time | location | bytes | request_ip | method | host | uri | status | referrer |
|----|------------|----------|----------|-------|-----------------|--------|-------------------------------|-----|--------|----------|
| 3 | 2019-06-23 | 08:54:43 | ORD50-C1 | 1469 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 4 | 2019-06-23 | 08:54:43 | ORD50-C1 | 1468 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 5 | 2019-06-23 | 08:54:43 | ORD50-C1 | 1470 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 6 | 2019-06-23 | 08:54:43 | ORD50-C1 | 1470 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 7 | 2019-06-23 | 08:54:43 | ORD50-C1 | 1468 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 8 | 2019-06-23 | 08:54:43 | ORD50-C1 | 1469 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 9 | 2019-06-23 | 08:54:43 | ORD50-C1 | 1469 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 10 | 2019-06-23 | 08:54:43 | ORD50-C1 | 1470 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 11 | 2019-06-23 | 08:54:43 | ORD50-C1 | 1470 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 12 | 2019-06-23 | 08:54:43 | ORD50-C1 | 1470 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 83 | 2019-06-23 | 08:49:32 | ORD50-C1 | 1477 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 88 | 2019-06-23 | 08:49:32 | ORD50-C1 | 1477 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 92 | 2019-06-23 | 08:49:32 | ORD50-C1 | 1477 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 99 | 2019-06-23 | 08:49:32 | ORD50-C1 | 1477 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 76 | 2019-06-23 | 08:49:30 | ORD50-C1 | 1478 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |
| 80 | 2019-06-23 | 08:49:30 | ORD50-C1 | 1479 | 185.244.215.156 | GET | d2ee8i73kfyy7w.cloudfront.net | / | 504 | - |

Security groups | EC2 Manager X +

https://ap-southeast-2.console.aws.amazon.com/ec2/v2/home?region=ap-southeast-2#SecurityGro ... durst Sydney Support

aws Services Resource Groups

Limits

INSTANCES

- Instances
- Launch Templates
- Spot Requests
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations

IMAGES

- AMIs
- Bundle Tasks

ELASTIC BLOCK STORE

- Volumes
- Snapshots
- Lifecycle Manager

NETWORK & SECURITY

- Security Groups**
- Elastic IPs
- Placement Groups

Create Security Group Actions

Filter by tags and attributes or search by keyword ? < 1 to 3 of 3 > >

| Name | Group ID | Group Name | VPC ID | Owner | Description |
|------|---------------------|------------------|--------------|--------------|-----------------|
| | sg-0202125396c5fb83 | pluralsight demo | vpc-d03d1bb7 | 359659591268 | pluralsight dem |

Security Group: sg-05211ed53b0e0bb3a

Description Inbound Outbound Tags

Edit

| Type | Protocol | Port Range | Source | Description |
|-------|----------|------------|-----------|-------------|
| HTTP | TCP | 80 | 0.0.0.0/0 | |
| HTTP | TCP | 80 | ::/0 | |
| HTTPS | TCP | 443 | 0.0.0.0/0 | |
| HTTPS | TCP | 443 | ::/0 | |

AWS CloudFront Management

https://console.aws.amazon.com/cloudfront/home?region=ap-southeast-2#alarms:

CloudFront Alarms From CloudWatch

Create Alarm

Alarming is billed at standard CloudWatch rates.

| State | Alarm Name | More Options |
|-------|------------------------------------|------------------------------------|
| OK | TheEvent - CloudWatch 5xxErrorRate | View in CloudWatch |

Viewing 1 to 1 of 1 Items

CloudFront

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THE EVERY DEVELOPER CONFERENCE ANYWHERE CONFERENCE

10-12 June, Copenhagen Opera House, København, DK

[About The Event](#)

Summary

Summary

Summary

Enable Logging

Summary

Enable Logging

Implement Monitoring

Summary

Enable Logging

Implement Monitoring

Configure Alerting

Summary

Enable Logging

Implement Monitoring

Configure Alerting

Troubleshooting