



Datadog + nuWIT

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INTRODUCTIONS

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cloud, crawlers, data viz & fashion blogs



THE MISSION

Fixing problems is easy if you know *where* they occurred and *why* they're happening. Maximum visibility into your system is the way to do that.

- Large-scale ops, "one stop shop"
- Graph / Alert / Analyze
- Real-time, fast, joy to use.



THE CLOUD

Infrastructure as a service (IaaS) is a way to build, scale and manage distributed systems.

- AWS, GCP, Azure + **many** more
- Too many context switches to troubleshoot one instance of a single service, combined would be (is) a nightmare

AMAZON WEB SERVICES



Elastic Cloud Compute (EC2) -
spin up an instance,
immediately start storing and
using data

Lambda - cloud computing
environment, no need for
provisioning nodes/servers



METRICS, LOGS & TRACES

- Metrics: made visible through graphs
- Logs: DD has great log management so you don't need to `grep` through strings printed throughout function execution
- Traces: made visible through APM

Service: coffee-house x

ERROR x

</>



Filters Saved Views

< Hide sidebar 6 results found

Export

Manage Facets 41 of 41

CORE

> Source

> Host

Service

fse-auto-process -

docker -

mcnulty-query -

consumer-service -

s3 -

coffee-house 6

bean-server -

nginx-service -

lambda -

DATE ↓	ROLE	MESSAGE
Sep 14 10:26:39.482	coffee-house > [main]	INFO datadog.trace.agent.ot.DDTracer - New instance: DDTracer-6cc4cdb9 (se...
Sep 14 10:26:38.316	coffee-house > [main]	INFO datadog.trace.agent.ot.DDTraceOTInfo - dd-trace - version: 0.6.0~0ca...
Sep 14 09:58:53.818	coffee-house > [main]	INFO datadog.trace.agent.ot.DDTracer - New instance: DDTracer-6cc4cdb9 (se...
Sep 14 09:58:52.774	coffee-house > [main]	INFO datadog.trace.agent.ot.DDTraceOTInfo - dd-trace - version: 0.6.0~0ca...
Sep 11 09:17:24.686	coffee-house > [main]	INFO datadog.trace.agent.ot.DDTraceOTInfo - dd-trace - version: 0.6.0~0ca...
Sep 10 20:36:03.393	coffee-house > 2018-09-11T00:36:03.393+0000	E QUERY [js] Interrupted by the host



WHERE DATADOG FITS IN

Amazon → Cloudwatch

Google → Stackdriver

Microsoft → Azure Monitor

Log management on Splunk

Services > env:staging > mcnulty-web > api/cluster.change > 6399972469375407126

mcnulty-web | api/cluster.change

Jul 28 17:17 PM 31.5 ms PUT /api/v1/tags/hosts/i-0c0abead7fb86... 201 CREA...



mcnulty-web | pylons.request api/cluster.change

i-040e32d24e4f091f0 31.5 ms (100.0 % of total time)

http.method PUT
http.status_code 201
http.url /api/v1/tags/hosts/i-0c0abead7fb868e35
pylons.route.action change
pylons.route.controller api/cluster
pylons.user
system.pid 11797

\$scope * ▼ \$region * ▼ \$autoscaling_group * ▼ \$image_id * ▼ ?

Amazon
EC2

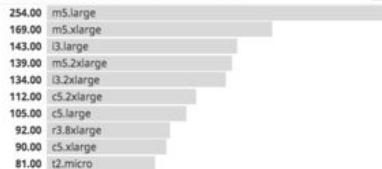
EC2 Service Status

11

Active EC2 Instances (max)

1.64K

Active EC2 Instances (max) by instance type



EC2 events

Upcoming AWS maintenance event Instance-stop on instance i-09ad6b91bd5ca4ea
Wed Sep 05 2018 07:06:06 GMT-0400 (tz_abbrev)

AWS maintenance instance-stop on instance i-08b8763461a215844 will soon be automatically run
Mon Sep 03 2018 03:00:22 GMT-0400 (tz_abbrev)

[Completed] AWS maintenance system-reboot on instance i-085e87177d2911044
Thu Aug 30 2018 16:09:13 GMT-0400 (tz_abbrev)

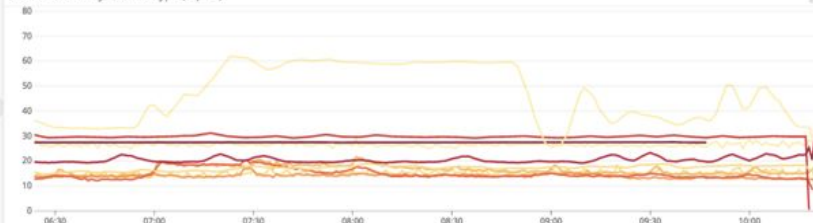
AWS maintenance system-reboot on instance i-085e87177d2911044 will soon be automatically run
Thu Aug 30 2018 16:00:38 GMT-0400 (tz_abbrev)

[Completed] AWS maintenance system-reboot on instance i-03e796635945ba9ca
Wed Aug 29 2018 12:12:16 GMT-0400 (tz_abbrev)

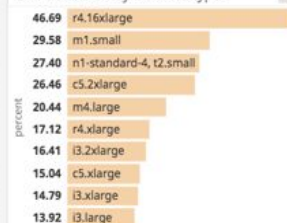
AWS maintenance system-reboot on instance i-

CPU

CPU utilization by instance type (top 10)



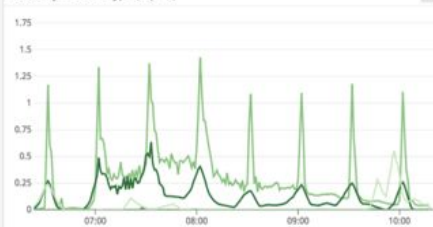
CPU utilization by instance type



Remember to [enable Detailed Monitoring](#) on your Amazon EC2 Instances from the AWS console to make sure your metrics are reported in one-minute intervals

I/O

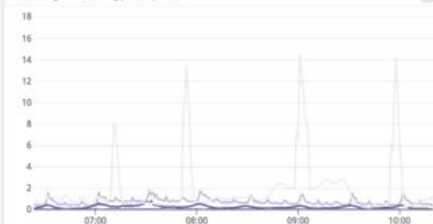
Reads by instance type (top 10)



Reads by instance type



Writes by instance type (top 10)

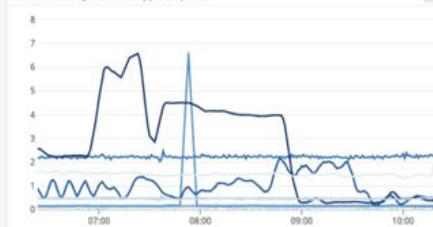


Writes by instance type

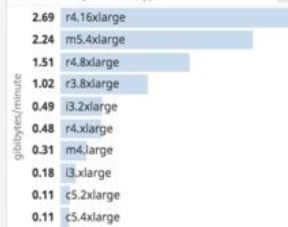


Network

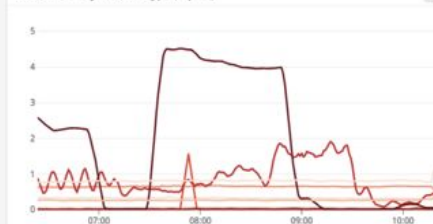
Network in by instance type (top 10)



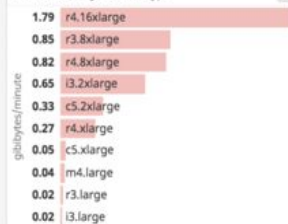
Network in by instance type



Network out by instance type (top 10)



Network out by instance type





DEMO



ABOUT DATADOG



THE COMPANY

- Founded in 2010 by, Oli and Alexis, two engineers in NYC
- By developers, for developers
- Builds ops tools that devs love to use
- Public beta in 2012
- Since then, all the graphs are up and to the right



HYPERGROWTH

- Scaling in every direction
- People, business, customers, products, offices, machines, complexity
- No sign of stopping.
- Lots of challenges to solve :)



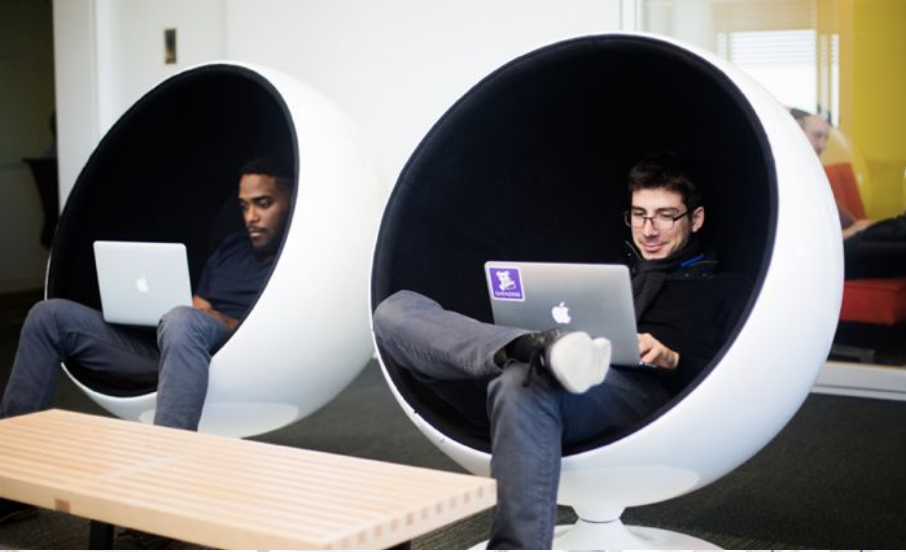
SOME OF OUR CUSTOMERS



NYTIMES BUILDING

45TH FLOOR





ENG CULTURE

- Standup
- Continuous delivery
- Autonomy & ownership
- Let data drive decisions.
- Move fast, work hard, go home



INTERNS AT DATADOG



Our Goals for Interns

- **Learn** by tackling challenging problems
- **Contribute** to real teams & real things
- **Build** long term connections
- Have a great **adventure** in New York
- Make **friends** for life
- **Grow** as a person
- **Apply** today on nuCareers!



FIN



START YOUR CAREER WITH US: datadog.com/careers

USE DATADOG AT SCHOOL: education.github.com/pack

HOLLER: natalie@datadoghq.com