

Over the next 5 years, the adoption of Microservices and Cloud computing will continuously increase

growth per year

18 %

Cloud Computing Market Size

21.7 %

Cloud Microservices Market

IoT

0100000

- Industry 4.0
- Edge computing

Self-driving cars

oio

- Smart homes
- Smart cities

CRITICAL CLOUD INFRASTRUCTURES

Availability and Reliability are Key



State Of The Internet LIVE®

Failures are inevitable



>\$40.000_{/h}

OUTAGES PER HOUR

+200

This is a live broadcast of Internet statistics, as collected by Pingdom from over 700,000 users across the world. See how you can use Pingdom to monitor your website.

Microsoft Office 365 Outage Reported For Some Users

The company says it has been 'applying steps to mitigate the issue' of connection timeouts for some mailbox users.

By Kyle Alspach

January 24, 2019, 12:37 PM EST



Replying to @sarbbottam

Sorry for the trouble! We'r the moment, and hope to normal as quickly as we ca



Zoom down for more than a thousand users - Downdetector

By Reuters Staff

1 MIN READ



Slack System Status Resources for real-time Slack service. Status.slack.com

10:32 PM · Jun 28, 2019 · Sparkcentral.com

Microsoft Teams down: video call service back online

INTEGRATED TELECOMMUNICATIONS SERVICES MARCH 3, 2021 / 5:51 PM / UPDATED 19 DAYS AGO

By Mike Moore 7 days ago

Microsoft Teams saw major outages, but should be back online

Google Cloud Outage Attributed To 'Infrastructure Components' Issues

'We are experiencing an issue with Google Cloud infrastructure components,' Google Cloud confirmed in a post on its Google Cloud Status Dashboard.

By Donna Goodison

March 26, 2020, 12:55 PM EDT

Facebook struggles to deal with epic outage



Oops!



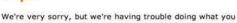
By <u>Donle O'Sullivan</u> and <u>Heather Kelly, CNN Business</u>
Updated 0654 GMT (1454 HKT) March 14, 2019



Slack asks investors to trust that outage costs were a 'one-time' issue

PUBLISHED THU, SEP 5 2019-4:31 PM EDT





just asked us to do. Please give us another chance--click the Back button on your browser and try your request again. Or start from the beginning on our <u>homepage</u>.

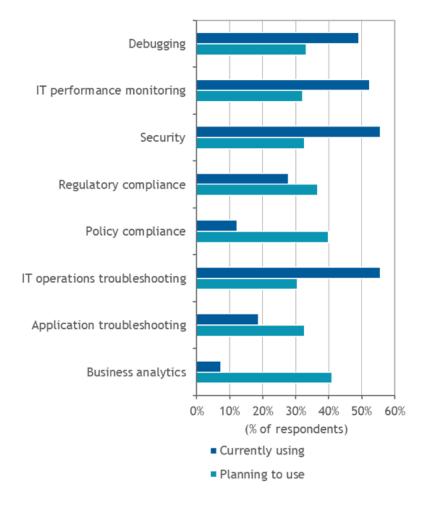




5-minute outage costs Google \$545,000 in revenue

DYLAN TWENEY @DYLAN20 AUGUST 16, 2013 4:06 PM

Fact
DevOps use logs to repair IT failures



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2019-08-22T06:32:32.544Z [jfrt ]
                                          [ifactoryApplication
2019-08-22T06:32:32.548Z [jfac]
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2019-08-22T06:32:40.256Z [jfac ]
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                                          [bootstrap.go:59
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2019-08-22T06:32:40.335Z [jfrpq]
                                          [routing_handler.go
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                                          [routing_handler.go
2019-08-22T06:32:40.335Z [jfrpq]
                                          [routing_handler.go
```

Problem

DevOps have two time-consuming options to troubleshoot IT failures



Log Search

(most companies choose this)

- Cheap, but requires a lot of manual work
- Does not scale to complex systems
- A lot of guesswork



Log Analysis

(fewer companies choose this)

- Simple, but expensive (requires many DevOps/SRE)
- High potential to overlook errors
- Human fatigue

Solution

Logsight.ai delivers automated log analytics through AI and pre-trained failure models

How It Works



We pre-train generic Al failure models



specialized with customers' systems behavior



We receive and process live logs from customers



notify customers if incidents happen



Customers receive detailed reports

Beyond the Status Quo

From log analysis to log analytics

How does it works



Al-driven log analytics

Deep Learning + Failure models





Log analysis

Clustering + Time Series

1. Unstructured

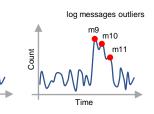
Dec 10 06:55:46: Invalid user webmaster from 173 Dec 10 06:55:46: input_userauth_request: invalid u Dec 10 06:55:46: pam_unix(sshd:auth): check pas-Dec 10 06:55:48: Connection closed by 173 234 31 Dec 10 07:02:47: Connection closed by 212.47.254 Dec 10 07:07:38: Invalid user test9 from 52.80.34.1 Dec 10 07:07:38; input userauth request; invalid u Dec 10 07:07:38: pam_unix(sshd:auth): check pas: Dec 10 07:07:45: Failed password for invalid user Dec 10 07:07:45: Received disconnect from 52.80. Dec 10 07:08:28: Invalid user webmaster from 173 Dec 10 07:08:28: input_userauth_request: invalid i Dec 10 07:08:28: pam_unix(sshd:auth): check pas-Dec 10 07:08:30: Connection closed by 173.234.31 Dec 10 07:11:42: Invalid user chen from 202.100.1

2. Clustering

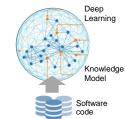
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3. Time series

4. Anomaly detection



0. Al Model



Unstructured

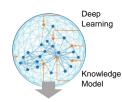


Structured



"logging.googleapis.com/sourceLocation":{

3. Al Inference



Invalid user webmaster from 173.234.31.186

Use Case

Log search versus Al-driven log analytics

~350.000 log lines per day 60 types of errors

Log search 240 minutes



Al-driven log analytics 4 minutes

- Experienced DevOps conduct troubleshooting
- Reading logs and searching for hints
- Search filters: grep, awk ... and error, warning ...

- 59s uploading ~350.000 log lines
- 64s pre-processing
- 90s Al-driven log analytics

Beyond the Status Quo

From search, and analysis to log analytics

Log search

grep, awk, kql

Log analysis

Clustering + Time Series

Log analytics

Deep Learning + Failure models

Troubleshooting efficiency

Innovation

The three fundamental pillars



Leading edge AI technology

Learned from +100M code lines Single and customized AI-models



Industry-ready

Deployed, tested, and continuously improved in collaboration with a large cloud provider



Long-term research

Results from years of research 5 PhD thesis 50+ publications

