



A monitoring solution for distributed applications

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Who am I?

- Software Engineer at Red Hat
- Developer in the PnT DevOps team;
- Part of the Factory 2.0 project;
- Automate and improve the Fedora and RHEL release pipeline;
- We develop microservices, mainly Python applications.

Why monitoring?



504

Gateway Timeout

source: <https://http.cat/>

Why monitoring?

Without monitoring...

- There's no issue detection... until the user tells you about it.
- There's no information about what happened.

Monitoring helps you:

- Analyze the health of a system.
- Notice issues before it is too late.

What I want to show you



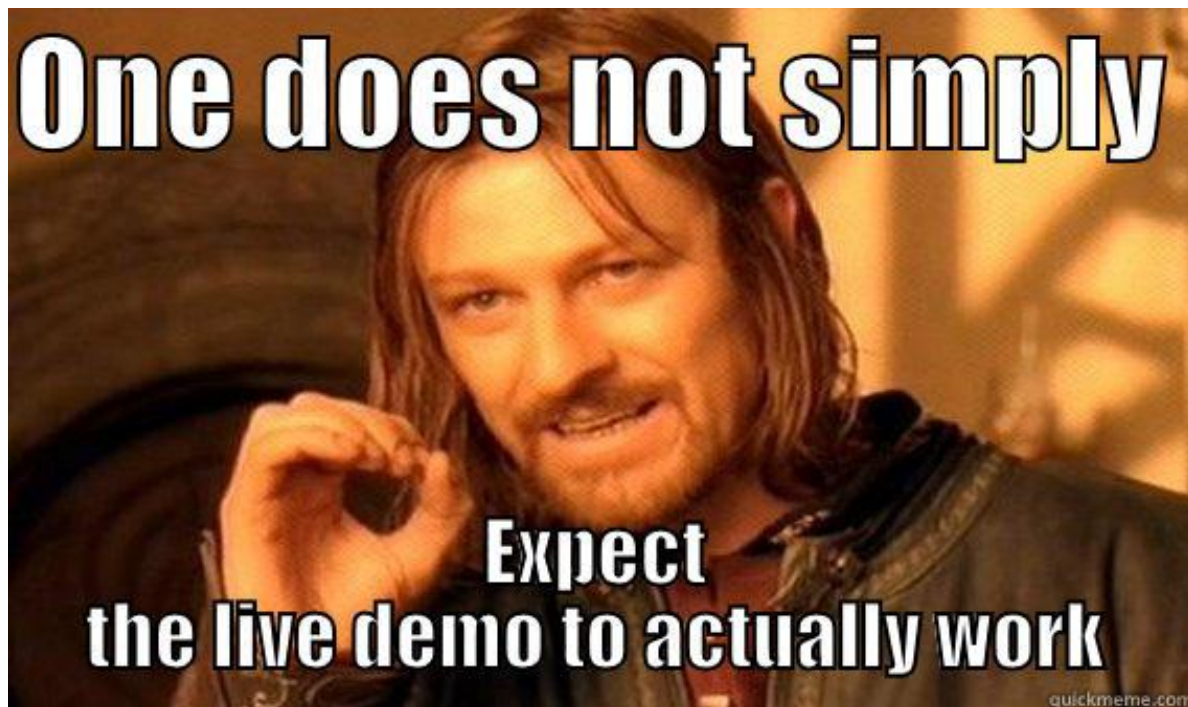
Custom
monitoring



Prometheus

- <https://prometheus.io/>
- Custom metrics
- [Exporters](#)
- Open source
- Friends with Openshift/Kubernetes

Prometheus demo



New Relic

New Relic allows you to:

- monitor your application's performances;
- monitor your resources;
- get alerts;
- automate requests from different locations to an HTTP endpoint.

New Relic

MONITOR

Overview

Results

Resources

Violations

REPORTS

SLA

SETTINGS

General

Script

Alert Conditions

Script your steps

[Scripting documentation](#)

```
4  * for details.
5  */
6
7  var assert = require('assert');
8
9  $http.post('https://[REDACTED]/api/v1.0/decision',
10 // Post data
11 {
12   json: {
13     decision_context: 'cvp_default',
14     product_version: 'cvp',
15     subject_type: 'koji_build',
16     subject_identifier: 'openstack-horizon-container-14.0-83',
17     verbose: true
18   }
19 },
20 // Callback
21 function (err, response, body) {
22   assert.equal(response.statusCode, 200, 'Expected a 200 OK response');
23
24   //console.log('body:', body);
25   assert.equal(body.policies_satisfied, true, 'Expected policies satisfied');
26   assert.equal(body.results.length, 2, 'Expected 4 results');
27 }
28 );
29
```

Save script

Validate

<https://docs.newrelic.com/docs/synthetics/new-relic-synthetics/scripting-monitors>

New Relic


 New Relic 

Maps Alerts 

Incidents Events Alert policies Notification channels

Mar 5, 5:18 am PST

Greenwave

 Incident preference: **By policy**

 Delete this policy

1 Alert condition

2 Notification channels

Last modified Oct 12, '18 11:34 am by 

 Search channels

 Add notification channels

Type 	Name 	
PagerDuty	Greenwave PagerDuty	
E-mail		

New Relic

Monitor name

Greenwave Decision API Availability

Apdex T [?]

7

☐ All locations

EUROPE

- ☐ Paris, FR
- ☐ Frankfurt, DE
- ☐ London, England, UK
- ☐ Dublin, IE

NORTH AMERICA

- ☐ Dallas, TX, USA
- ☐ Washington, DC, USA
- ☐ Columbus, OH, USA
- ☐ Fremont, CA, USA
- ☐ Portland, OR, USA
- ☐ Montreal, Québec, CA
- ☐ San Francisco, CA, USA
- ☐ Newark, NJ, USA

AUSTRALIA

- ☐ Sydney, AU

ASIA

- ☐ Tokyo, JP
- ☐ Mumbai, IN
- ☐ Seoul, KR
- ☐ Singapore, SG

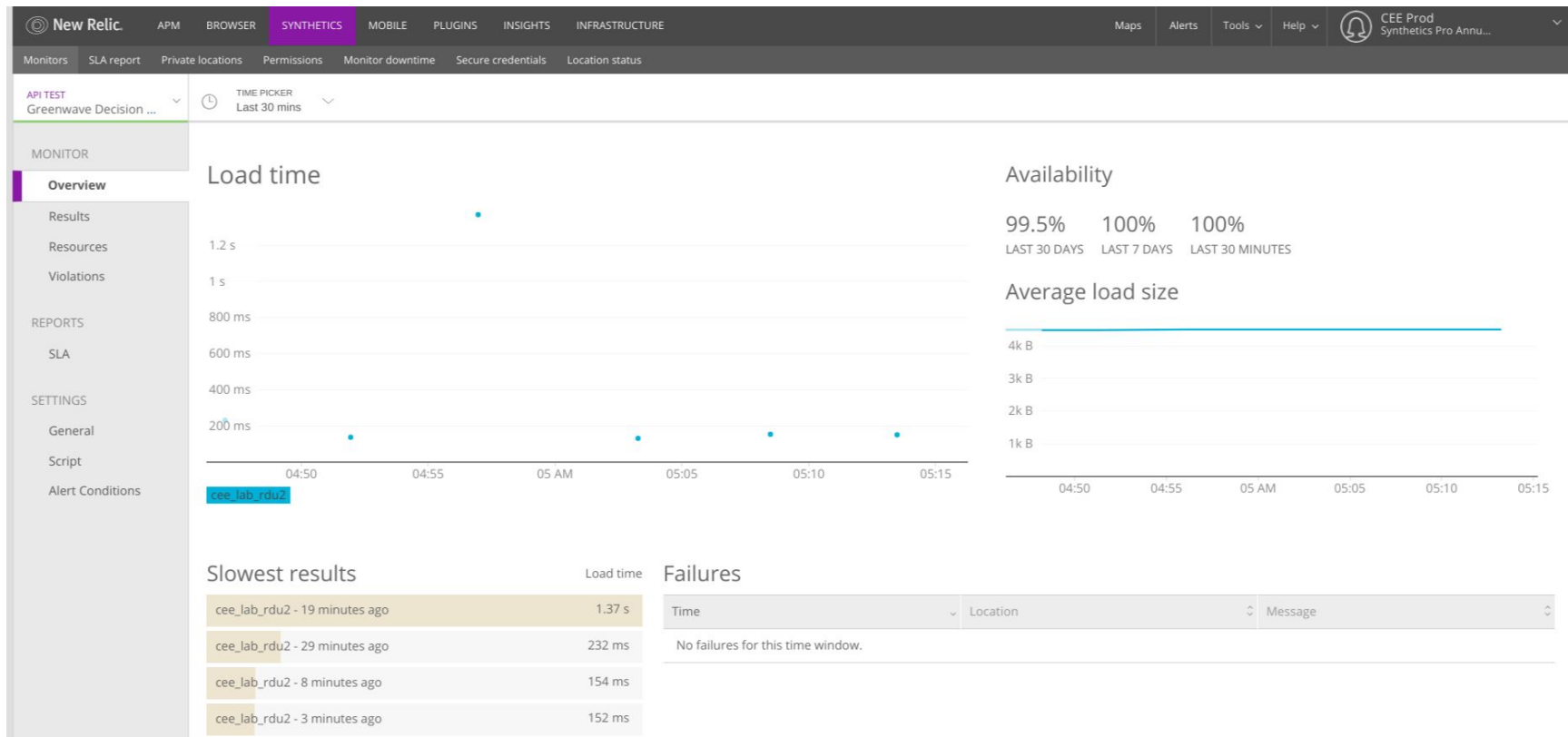
SOUTH AMERICA

- ☐ São Paulo, BR

1 min **5 min** 10 min 15 min 30 min 1 hr 6 hr 12 hr 1 day

5,000,000 Available total monthly checks
- 3,455,820 Scheduled monthly checks [?]
- 8,640 Est. monthly checks for this monitor
1,535,540 Remaining total monthly checks

New Relic



New Relic

< RESULTS

cee-lab-rdu2 - Mar 5th 2019, 4:56

Private location

4.39 kB

1

BYTES TRANSFERRED

TOTAL REQUESTS

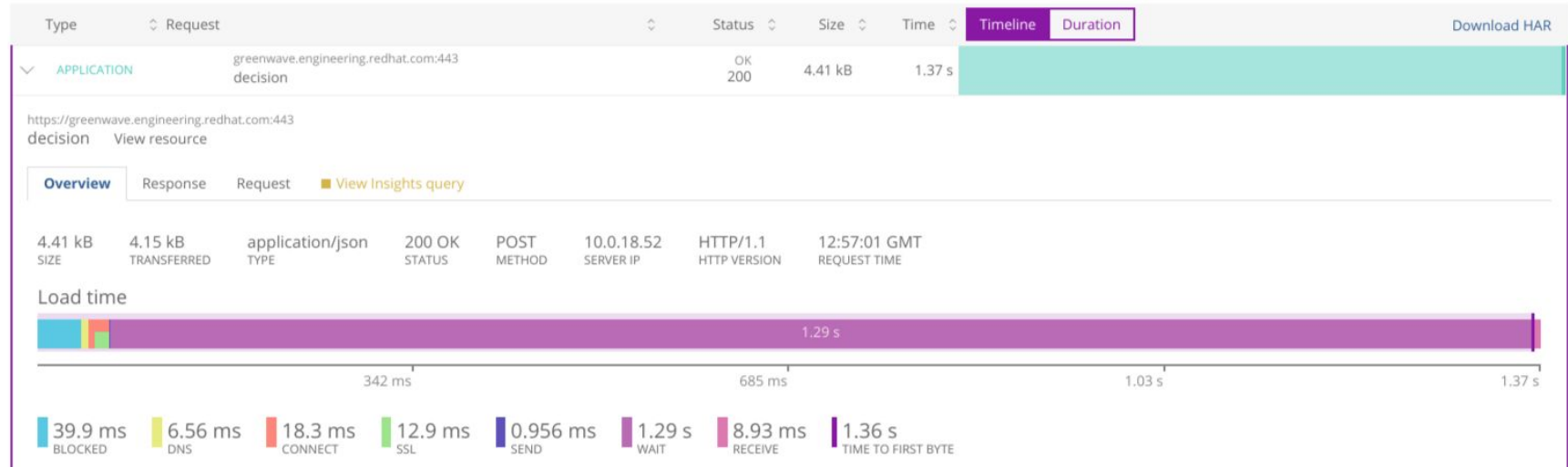
Timeline

SHOW ONLY

1.37 s

Application

Search requests



New Relic

Monitor Specific Uptime Past 7 Days

Since 7 days ago

Availability



7 Day Overall Uptime

Since 7 days ago

100
Percentage

Greenwave Decision Latency

Since 7 days ago



30 days uptime by monitor

Since 30 days ago

Availability



30 Day Overall Uptime

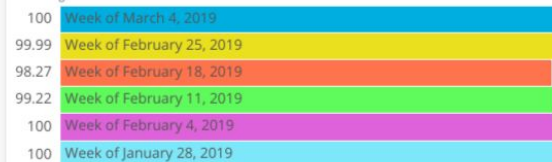
Since 30 days ago

99.42
Percentage

Overall Uptime Percentage by Week

Since 1 month ago

Percentage



October 2018 by monitor

Since 01 Oct 02:00 CEST until 01 Nov 00:59 CET

Availability



Last 3 Month Overall Uptime

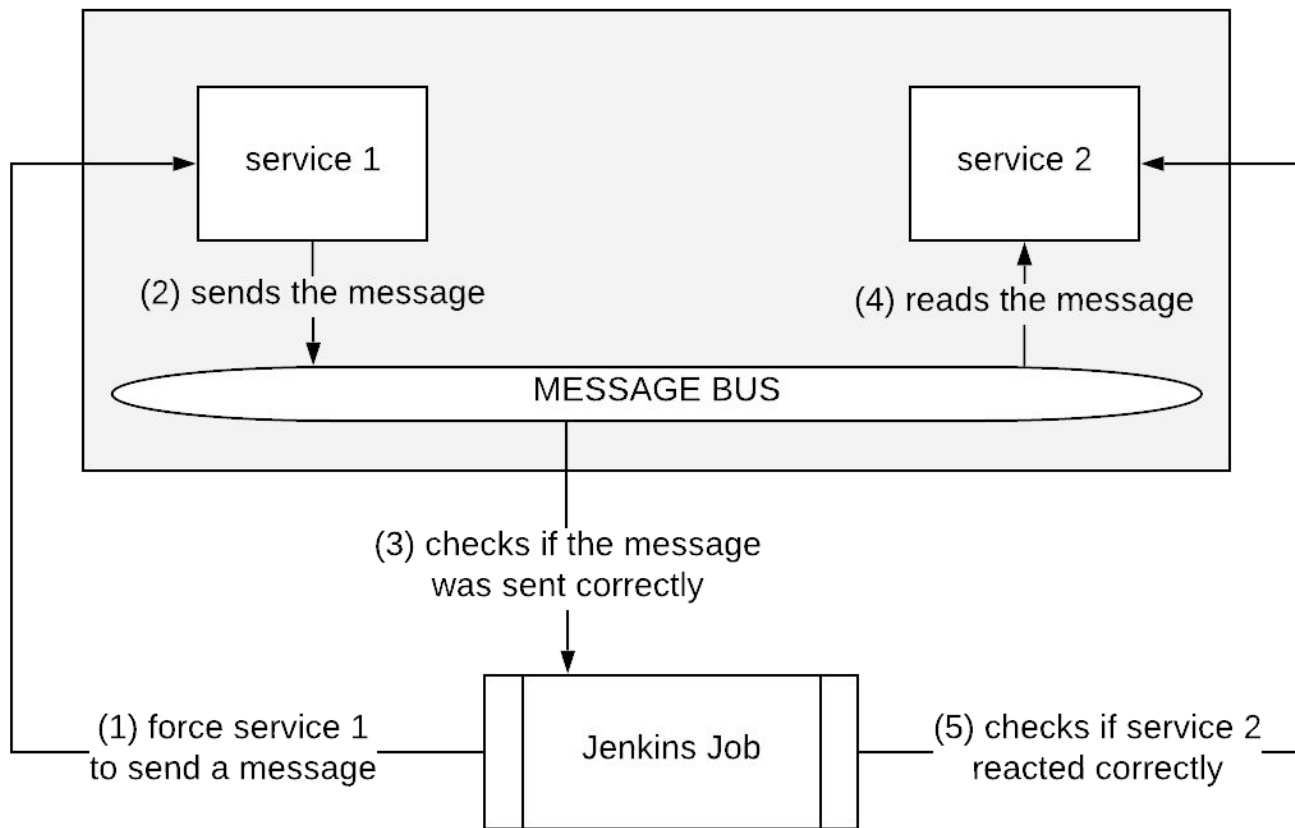
Since 3 months ago

98.45
Percentage

Custom monitoring: E2E test

- A test that we wrote
- Custom monitoring solution
- Check if **messages** are correctly sent and received
- Customized based on our needs
- Jenkins job

Custom monitoring: E2E test



Conclusion

- Monitoring is important;
- There's no “best alternative”, only one suitable for you;
- If you don't find what you need, write it.



Thank you

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