

splunk> **.conf2017**

Monitoring End User Experiences With Splunk and New Relic

Break down the silos in your observability infrastructure.

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Date | Washington, DC

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New Relic At A Glance:

NEWRR

NYSE – 2014

15k+

Customers

1.5B

Scale: Events & Metrics Per Minute

1,700+ Global Enterprises

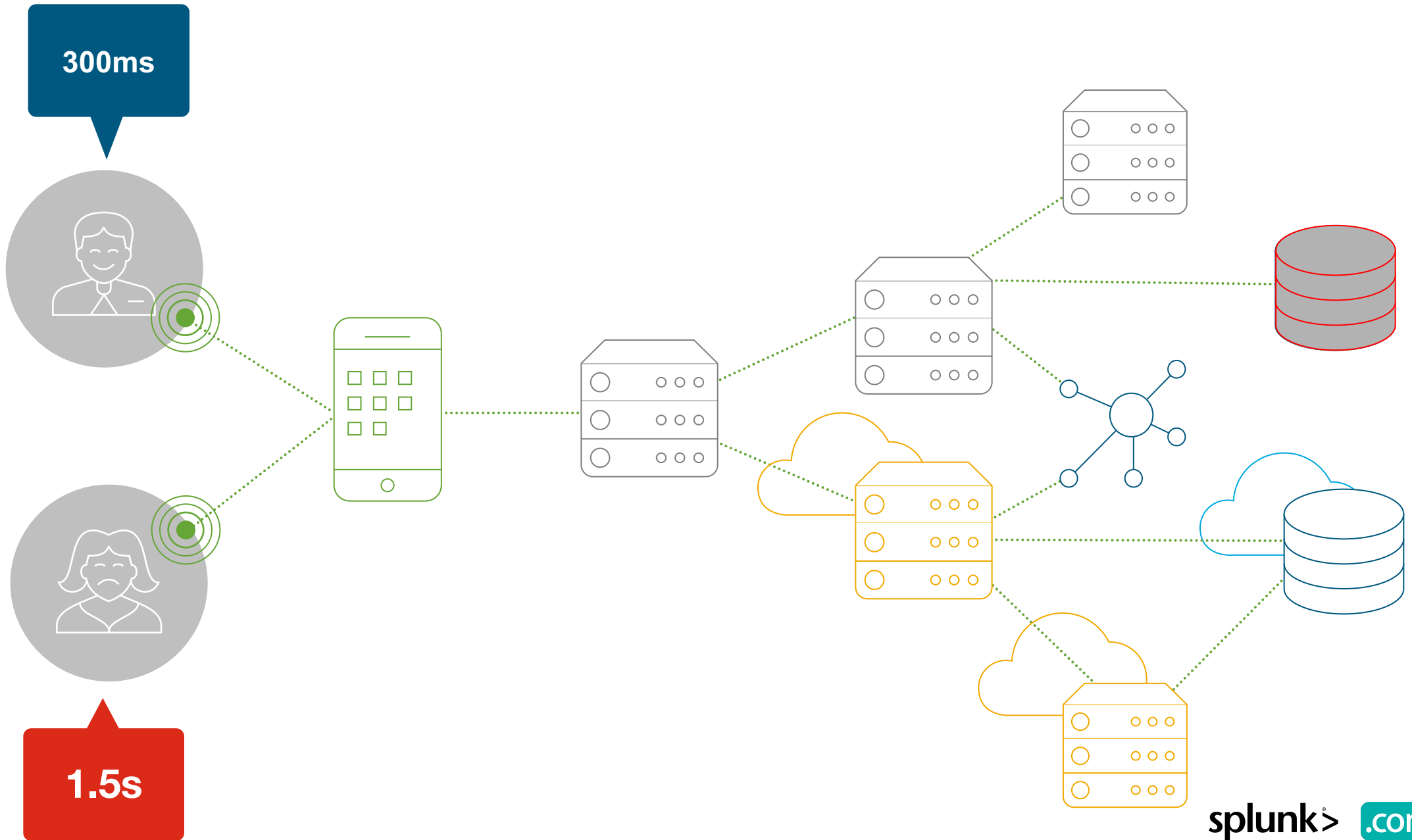
13,500+ Disruptors

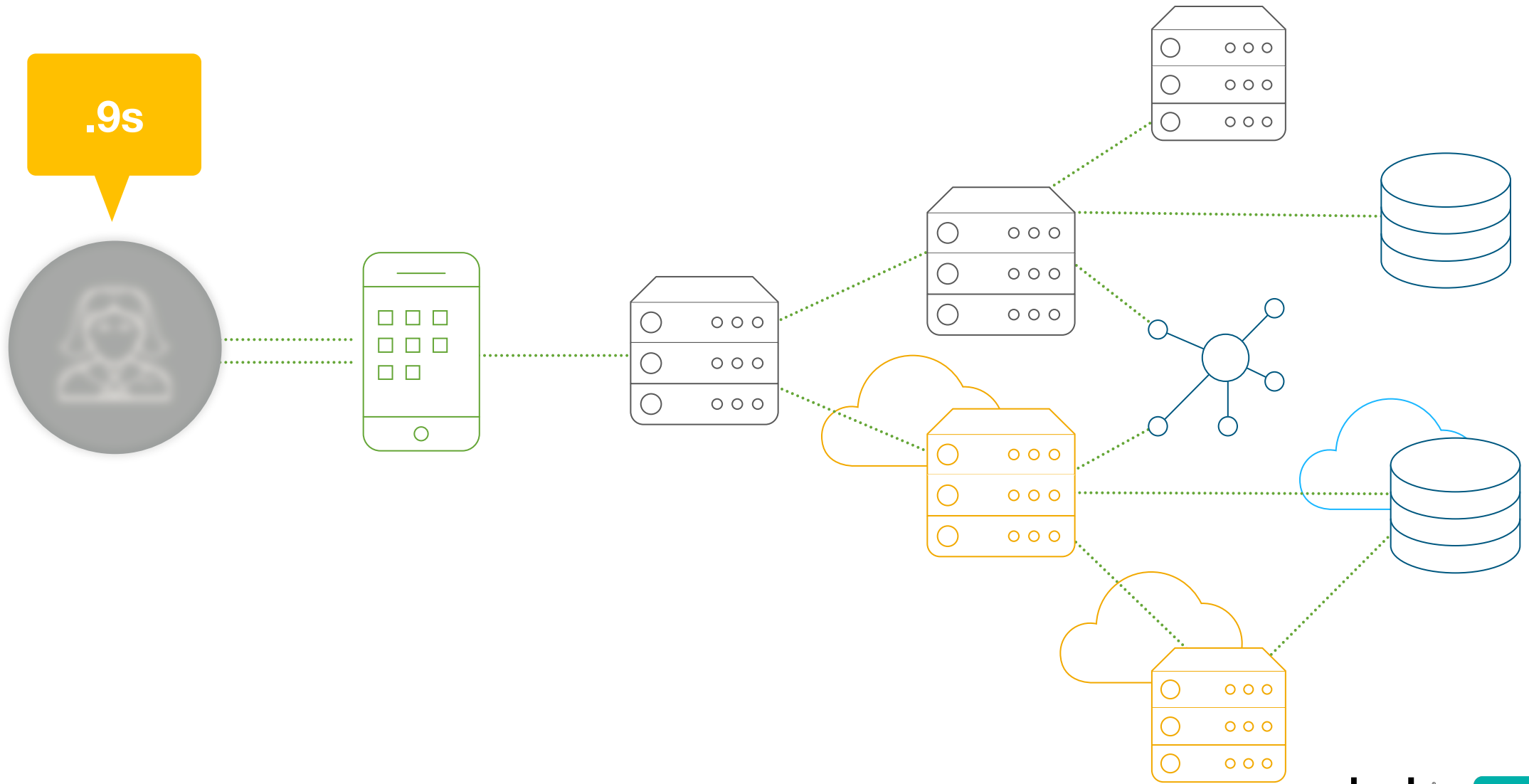


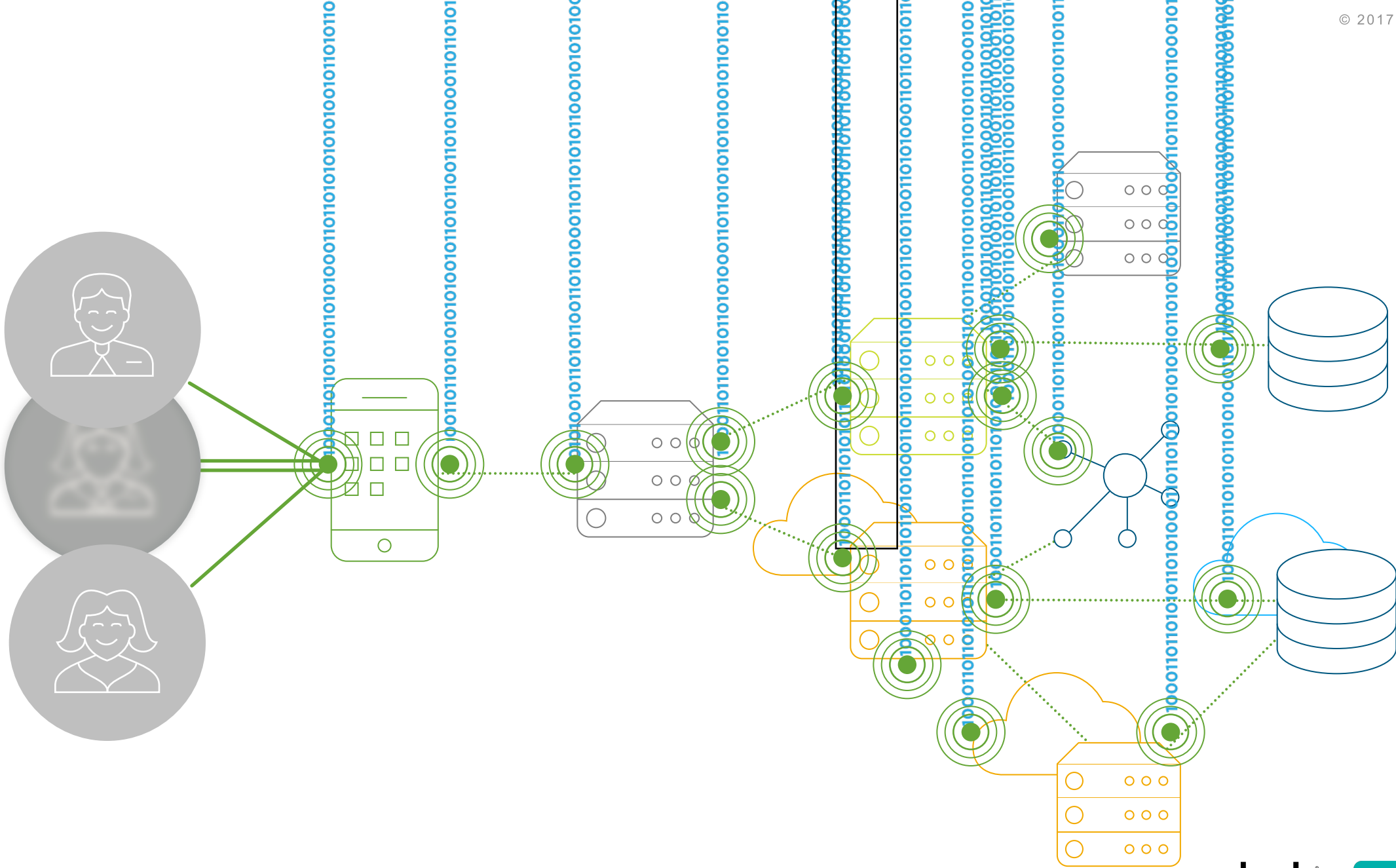
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Why is monitoring hard?

130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D15LAF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FI-SW-03"
128.241.220.82 - - [07/Jan 18:10:57:123] "GET /product.screen?product_id=FL-DSH-01&JSESSIONID=5D55L7FF6ADFF0 HTTP 1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=purchase&itemId=EST-268&product_id=K11-01"
ows NT 5.1; SV1: .NET CLR 1.1.4322" 468 125.17 14.1.1.189] "GET /oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D55LFF1ADFF3 HTTP 1.1" 200 3865 "http://buttercup-shopping.com/cart.do?action=remove&itemId=EST-14"
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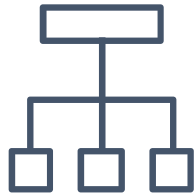






From any source, monitoring data can be organized into three main categories

Traces



Relationships between events

Examples

Application components involved during a request with an error

New Relic Provides



Metrics

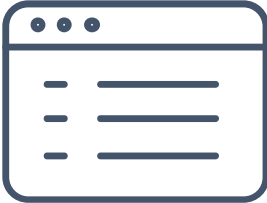


Measurement of an event

Throughput, error rate, request rate, request duration



Logs



Human-readable events

System startup output, process output

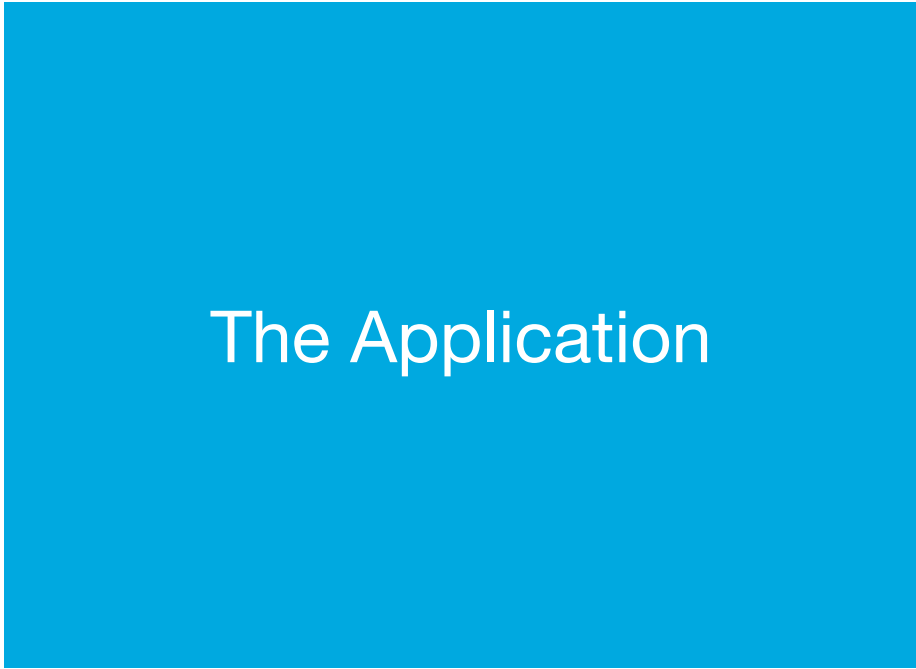
**via Splunk Integrations*



What is a transaction trace?

130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D15L9FF1ADFF3 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FI-5W-01" "Mozilla/5.0 (Windows NT 5.1; SV1; .NET CLR 1.1.4322)"
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10.0.0.1 - - [07/Jan 18:10:55:187] "GET /category.screen?category_id=FLOWERS&JSESSIONID=5D55L7FF6ADFF0 HTTP 1.1" 200 3865 "http://buttercup-shopping.com/cart.do?action=remove&itemId=EST-14" "Mozilla/5.0 (Windows NT 5.1; SV1; .NET CLR 1.1.4322)"
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Traces: How Did an Application Arrive at a Result?



The Application



Result

130.60.4 - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D15LAF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FI-5w-01"
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10.0.0.1:5V1: - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 385 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D55L9FF1ADFF3"
10.0.0.1:5V1: - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 468 125.17.14 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D55L9FF1ADFF3"
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10.0.0.1:5V1: - [07/Jan 18:10:56:156] "GET /category.screen?category_id=FLOWERS&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 385 "http://buttercup-shopping.com/category.screen?category_id=FLOWERS&JSESSIONID=5D55L9FF1ADFF3"
10.0.0.1:5V1: - [07/Jan 18:10:56:156] "GET /category.remove&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 385 "http://buttercup-shopping.com/category.remove&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D55L9FF1ADFF3"

Transactions Are a Central Part of New Relic's Product and Help Developers Diagnose and Troubleshoot Many Problems Without Guessing.

MONITORING

- Overview
- Service maps
- App map
- Transactions**
- External services
- Ruby VMs

EVENTS

Most time consuming

Doppelganger::Proxy#call	86.4%
Doppelganger::Frontend/dashboard	13.1%
Doppelganger::Webhook#labeled	0.54%
Middleware/Rack/Rack::SslEnforcer#call	

Show all transactions table...

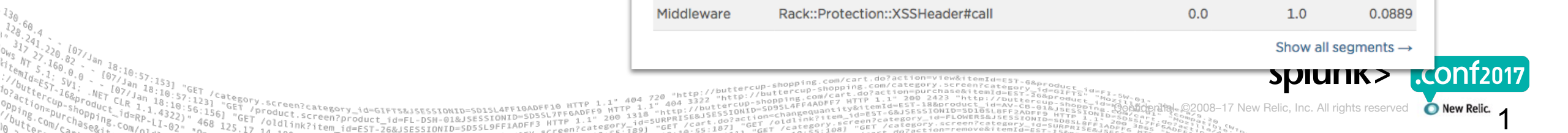
Delete all traces Delete all traces

Breakdown table

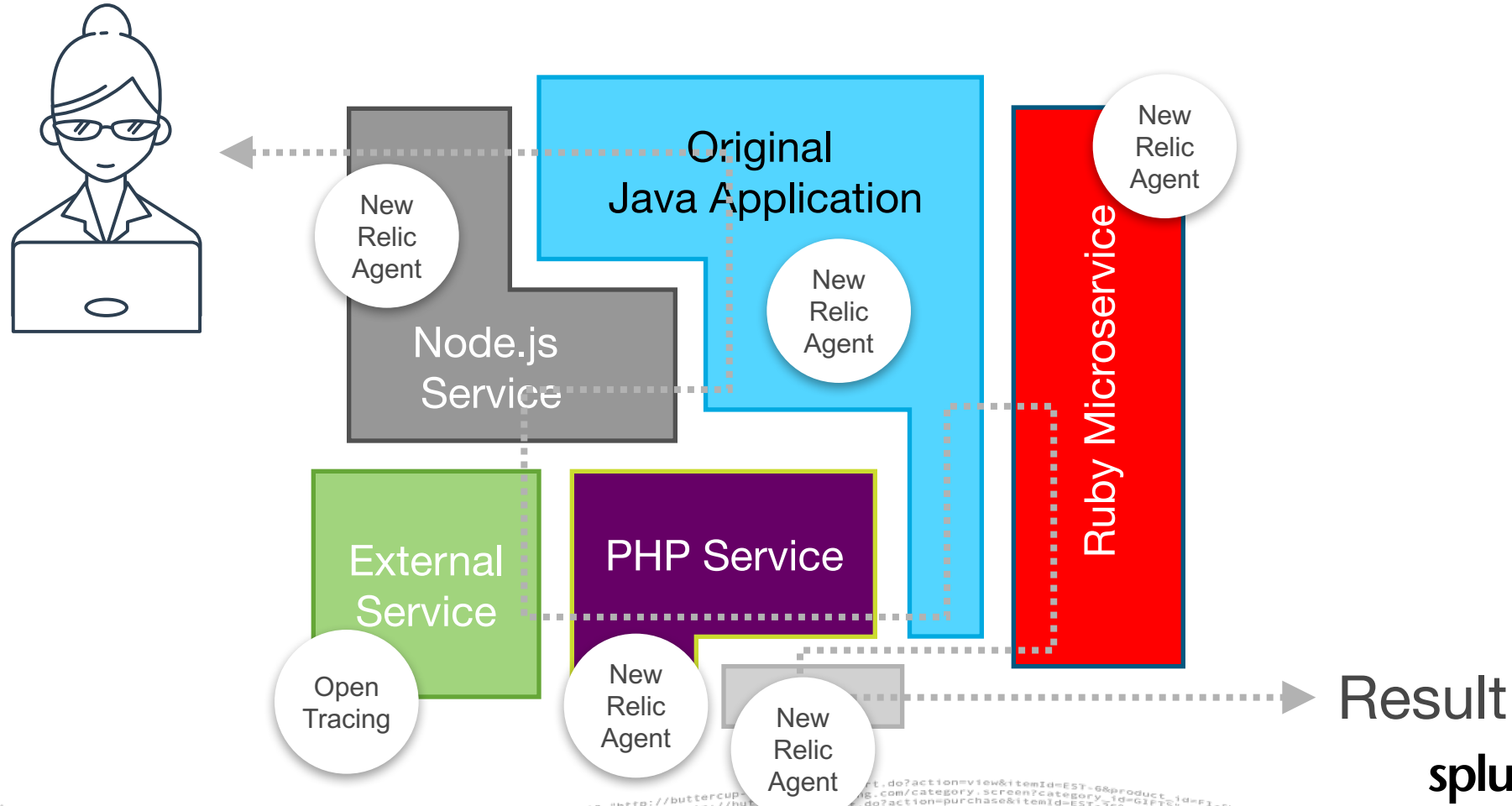
Transaction detail: what segments were involved.

Category	Segment	% Time	Avg calls (per txn)	Avg time (ms)
External	Net::HTTP[source.datanerd.us]: GET	92.8	0.954	263
Custom	Doppelganger::GitManager/discover	5.2	0.954	14.7
Sinatra	Doppelganger::Frontend/dashboard	1.1	1.0	3.07
Middleware	Rack::Attack#call	0.2	1.0	0.591
Rack App	Rack::Cascade#call	0.1	0.954	0.423
Middleware	NewRelic::Rack::AgentHooks#call	0.1	1.0	0.414
Middleware	Rack::SslEnforcer#call	0.1	1.0	0.358
Middleware	Rack::Protection::XSSHeader#call	0.0	1.0	0.0889

Show all segments →



With Microservices, Applications ("Monoliths") Get Broken Up Into Smaller Pieces. The Traces *Now Go Through Multiple Programs.*



eComm Ecomm Service

Ruby app

828 ms
Response time

0.85 [1.1]
Apdex

14 rpm
Throughput

0 %
Error rate

eComm Products Service

Ruby app

341 ms
Response time

0.88 [0.597593]
Apdex

11 rpm
Throughput

0 %
Error rate

eComm Media Service

Php app

340 ms
Response time

0.78 [0.3]
Apdex

8.33 rpm
Throughput

0 %
Error rate

User Service

Java app

Storefront

Browser

2.53 s
Browser page load time

28.3 ppm
Throughput by browser

0.143 s
AJAX response time

0 %
Error rate

Storefront

Java app

Order Service

Java app

eComm Catalog Service

Ruby app

eComm Customer Service

Ruby app

Inventory Service

Java app

eComm Advertising Service

Ruby app

41.3 ms
Response time

0.94 [0.5]
Apdex

13.7 rpm
Throughput

0 %
Error rate

```

.../category.screen?category_id=GIFTS&SESSIONID=SD1SLAFF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-188&product_id=AV-CB-01&SESSIONID=SD1095L9FF1ADFF9 HTTP 1.1" 200 2423 "http://buttercup-shopping.com/operation...
.../product.screen?product_id=FL-DSH-01&SESSIONID=SD55L7FF6ADFF9 HTTP 1.1" 404 3322 "http://buttercup-shopping.com/operation...
.../oldlink?item_id=EST-26&SESSIONID=SD55L9FF1ADFF3 HTTP 1.1" 200 1316 "http://buttercup-shopping.com/operation...
.../category.screen?category_id=FLOWERS&SESSIONID=SD55L9FF1ADFF3 HTTP 1.1" 200 3865 "http://buttercup-shopping.com/operation...
.../category.screen?category_id=FLOWERS&SESSIONID=SD55L9FF1ADFF3 HTTP 1.1" 200 3865 "http://buttercup-shopping.com/operation...
.../category.remove&itemId=EST-188&SESSIONID=SD55L9FF1ADFF3 HTTP 1.1" 200 3865 "http://buttercup-shopping.com/operation...

```


Volume of operational data being generated is growing exponentially.

Web App: *Then*



- 1 application
- 3 large servers
- 1 database
- 1 data center
- 1 deploy/quarter

Web App: *Now*



- 30 containers
- 4 services
- 10 small instances
- 2 managed services
- 2 databases
- 2 cloud regions
- 3 deploys/day

```

130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD1SLAFF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FL-SW-03"
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itemId=EST-16&product_id=RP-LI-02" 468 125.17.14.189] "GET /oldlink?item_id=EST-26&JSESSIONID=SD5SL9FF1ADFF3 HTTP 1.1" 200 385 "http://buttercup-shopping.com/cart.do?action=remove&itemId=EST-189" "GET /category.screen?category_id=FLOWERS&JSESSIONID=SD55L7FF6ADFF0 HTTP 1.1" 200 385 "http://buttercup-shopping.com/cart.do?action=purchase&itemId=EST-208&product_id=FL-SW-03"
http://buttercup-shopping.com/cart.do?action=purchase&itemId=EST-208&product_id=FL-SW-03"

```


To answer operational questions, teams define their own metrics, logging, and alerting practices.

Operations



Backend



Frontend



130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D15LAF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=F1-5w-03" "Mozilla/5.0 (Windows NT 6.0; rv:1.9.2.0) Gecko/20100101 Firefox/3.6" 317 27.160.0.0 - - [07/Jan 18:10:57:123] "GET /product.screen?product_id=FL-DSH-01&JSESSIONID=5D55L7FF6ADFF0 HTTP 1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=purchase&itemId=EST-268product_id=F1-5w-03" "Mozilla/5.0 (Windows NT 6.0; rv:1.9.2.0) Gecko/20100101 Firefox/3.6" 107 10.0.0.0 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D55L9FF1ADFF3" "Mozilla/5.0 (Windows NT 6.0; rv:1.9.2.0) Gecko/20100101 Firefox/3.6" 468 125.17.14.108 - - [07/Jan 18:10:55:187] "GET /category.screen?category_id=FLOWERS&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 3885 "http://buttercup-shopping.com/cart.do?action=remove&itemId=EST-1" "Mozilla/5.0 (Windows NT 6.0; rv:1.9.2.0) Gecko/20100101 Firefox/3.6" 107 10.0.0.0 - - [07/Jan 18:10:55:189] "GET /category.screen?category_id=FLOWERS&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 3885 "http://buttercup-shopping.com/cart.do?action=remove&itemId=EST-1" "Mozilla/5.0 (Windows NT 6.0; rv:1.9.2.0) Gecko/20100101 Firefox/3.6"

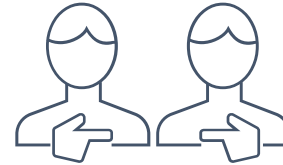
Important operational data becomes siloed by service, app, or infrastructure type.

Operations



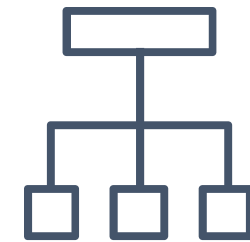
Infrastructure Metrics

Backend



Java application logs

Frontend



Application **splunk**

New Relic consolidates operational data to answer hard questions *across* teams, apps, and platforms.

Operations



Backend



Frontend



Infrastructure Metrics



Java application logs



Application Traces

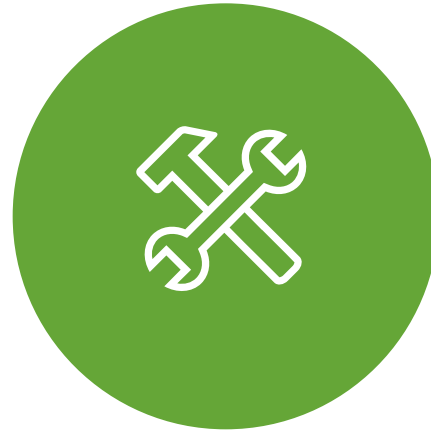
Why would you want this?



Reduce MTTR with
production log insights

+

metric-based application
monitoring



See real-time application
behaviors with byte-code
instrumentation data
in Splunk



See Splunk infra &
security alerts
in New Relic

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130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D15L9FF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=F1-SW-03" "Mozilla/5.0 (Macintosh; Intel Mac OS X 11_0_0; rv:52.0) Gecko/20100801 Firefox/52.0"
128.241.220.82 - - [07/Jan 18:10:57:123] "GET /product.screen?product_id=FL-DSH-01&JSESSIONID=5D55L7FF6ADFF9 HTTP 1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=purchase&itemId=EST-268product_id=KQ-CW-01" "Mozilla/5.0 (Macintosh; Intel Mac OS X 11_0_0; rv:52.0) Gecko/20100801 Firefox/52.0"
317 27.160.0.0 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D55L9FF1ADFF3" "Mozilla/5.0 (Macintosh; Intel Mac OS X 11_0_0; rv:52.0) Gecko/20100801 Firefox/52.0"
itemId=EST-16&product_id=RP-LI-02" 468 125.17 14.118.189] "GET /category.screen?category_id=FLOWERS&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 3865 "http://buttercup-shopping.com/cart.do?action=remove&itemId=EST-1"
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Data Sources - Splunk and New Relic

Splunk Strengths

- ▶ Machine Data (specifically, around logs)
- ▶ Breadth across infrastructure (network, server, cloud infrastructure)
- ▶ Root cause analysis (often via config changes that are logged)
- ▶ Business-level KPIs, SLOs, etc. that span multiple applications
- ▶ Long term storage of raw management data

New Relic Strengths

- ▶ Dependencies across app (via Agents embedded inside apps & microservices)
- ▶ Breadth of Code level (BCI) (Java, .Net, Ruby, Node.js, PHP, Python, Go, iOS, Android, Javascript)
- ▶ End User Monitoring (response time, etc.)
- ▶ Real-time Trace/Transactions time-series data
- ▶ Ease of instrumentation & agent install

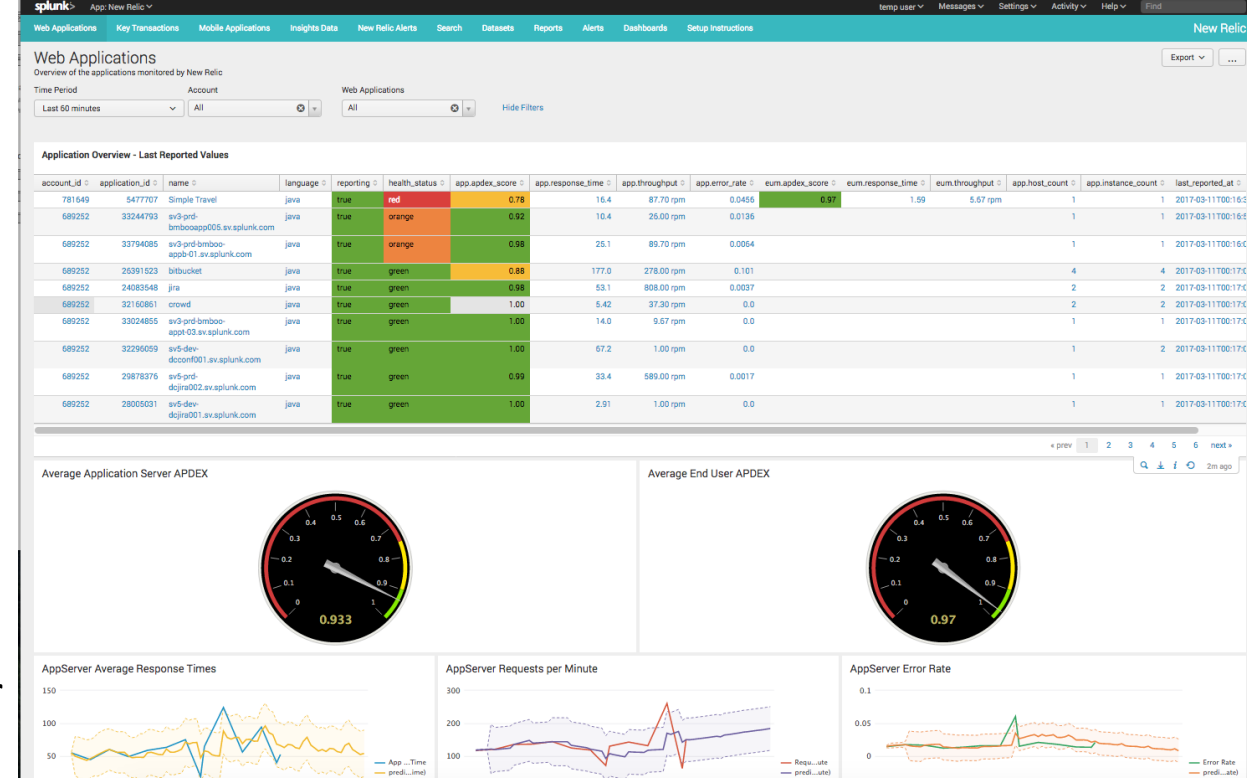


How about you demo this thing already?

130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D15LAF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FI-SW-01" "Mozilla/5.0 (Windows NT 5.1; SV1; .NET CLR 1.1.4322)"
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317.27.160.0.0 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D55L9FF1ADFF3" "Mozilla/5.0 (Windows NT 5.1; SV1; .NET CLR 1.1.4322)"
102.151.191.189 - - [07/Jan 18:10:55:187] "GET /category.screen?category_id=SURPRISE&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 585 "http://buttercup-shopping.com/oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3" "Mozilla/5.0 (Windows NT 5.1; SV1; .NET CLR 1.1.4322)"
102.151.191.189 - - [07/Jan 18:10:55:187] "GET /category.screen?category_id=SURPRISE&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 585 "http://buttercup-shopping.com/oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3" "Mozilla/5.0 (Windows NT 5.1; SV1; .NET CLR 1.1.4322)"
102.151.191.189 - - [07/Jan 18:10:55:187] "GET /category.screen?category_id=SURPRISE&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 585 "http://buttercup-shopping.com/oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3" "Mozilla/5.0 (Windows NT 5.1; SV1; .NET CLR 1.1.4322)"
102.151.191.189 - - [07/Jan 18:10:55:187] "GET /category.screen?category_id=SURPRISE&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 585 "http://buttercup-shopping.com/oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3" "Mozilla/5.0 (Windows NT 5.1; SV1; .NET CLR 1.1.4322)"
102.151.191.189 - - [07/Jan 18:10:55:187] "GET /category.screen?category_id=SURPRISE&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 585 "http://buttercup-shopping.com/oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3" "Mozilla/5.0 (Windows NT 5.1; SV1; .NET CLR 1.1.4322)"
102.151.191.189 - - [07/Jan 18:10:55:187] "GET /category.screen?category_id=SURPRISE&JSESSIONID=5D55L9FF1ADFF3 HTTP 1.1" 200 585 "http://buttercup-shopping.com/oldlink?item_id=EST-26&JSESSIONID=5D55L9FF1ADFF3" "Mozilla/5.0 (Windows NT 5.1; SV1; .NET CLR 1.1.4322)"

Integration Highlights - Splunk App for New Relic

- ▶ Ease of integration with New Relic APIs to collect application, transaction, mobile, browser and synthetic performance and quality key performance indicators
- ▶ Out-of-the-box dashboards to summarize transaction response time, ApDex, errors and other key information
- ▶ Long term storage of data collected by New Relic add-on



The screenshot shows the 'Add New Relic Account Summary' form. It includes the following fields and options:

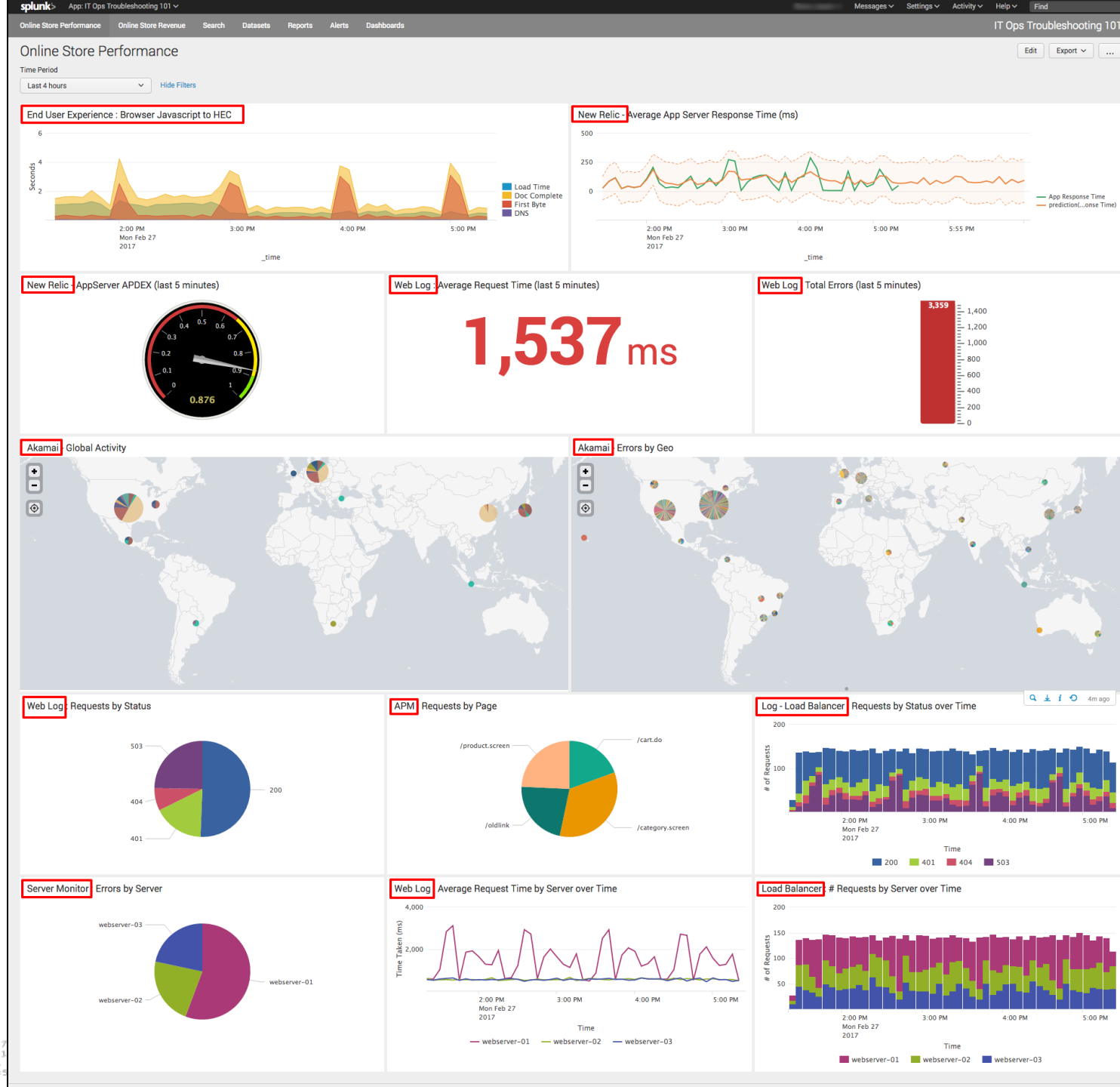
- Name ***: A text input field with a placeholder 'Enter a unique name for the data input'.
- Interval ***: A text input field with a placeholder 'Time interval of input in seconds'.
- Index ***: A dropdown menu set to 'default'.
- New Relic Account Number ***: A text input field with a placeholder 'This can be found in the URL when you log into New Relic. e.g. https://rpm.newrelic.com/accounts/#####/...'.
- New Relic API Key ***: A text input field with a placeholder 'Your API Key can be found here: https://rpm.newrelic.com/accounts/#####/integrations?page=api_keys'.
- Metric Sets to Collect ***: A set of checkboxes for 'APM', 'Key Transactions', 'Mobile Applications', and 'Alert Violations', all of which are currently checked.

At the bottom of the form, there are 'Cancel' and 'Add' buttons. A note at the bottom says 'Select the APIs you would like to collect.'



Splunk and New Relic: Break Down Silos

- ▶ Combine dashboard elements spanning many data sources
- ▶ Provide dashboards across many users
- ▶ Correlate time-series data based on Splunk Search Processing Language (SPL)



```
17:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD5L9FF1ADFF3 HTTP 1.1" 404 1
18:10:57:123] "GET /product.screen?product_id=FL-DSH-01&JSESSIONID=SD5L9FF1ADFF3 HTTP 1.1" 200 1318
-1.4322)" 468 125.17 14.1 "GET /oldlink?item_id=EST-26&JSESSIONID=SD5L9FF1ADFF3 HTTP 1.1" 200 1318
P-LI-02" "0
```

Splunk Alerts In New Relic

New Relic INSIGHTS
NRQL> SELECT | Run

Splunking - Security Alerts

★ Edit

🕒 Default 30m **60m** 6h 1d 7d Custom

Failed Attempts Total

Since 60 minutes ago

65
56

Login Failures Alerts

Failures by IP

Since 60 minutes ago

Total Failure Times

18	10.147.9.39
14	10.147.9.66
8	10.145.145.146
7	10.147.9.17
6	10.152.11.09
4	210.217.174.98
3	10.147.9.77
3	10.147.9.55
2	10.145.145.38

Failures by User ID

Since 60 minutes ago

Total Failure Times

18	adm_pedrod3001
14	tim
8	adm_abapiwa
7	adm_SamiiHoran
6	adm_ALiaALanziQ8
4	admin
4	root
2	adm_Trungx
2	admin2

10 Most Recent Alerts

Since 60 minutes ago

Timestamp	Dest Ip	Event	Failure Times	Last Attempt	Source Ip	User
13 Dec 21:54:05	10.2.3.34	sshd	1	12/13 09:46:37 PM	10.147.9.39	adm_pedrod3001
13 Dec 21:53:00	10.2.3.34	sshd	1	12/13 09:46:37 PM	10.147.9.39	adm_pedrod3001
13 Dec 21:51:55	10.2.3.34	sshd	1	12/13 09:46:37 PM	10.147.9.39	adm_pedrod3001
13 Dec 21:50:50	10.2.3.34	sshd	1	12/13 09:46:37 PM	10.147.9.39	adm_pedrod3001
13 Dec 21:49:45	10.2.3.34	sshd	1	12/13 09:46:37 PM	10.147.9.39	adm_pedrod3001

Login Failures by incoming IP

Since 60 minutes ago

10.147.9.39	10.147.9.66	10.145.145.146	10.147.9.17
10.152.11.09	210.217.174.98	10.147.9.77	10.147.9.55
10.145.145.38			

130.60.4
128.241.2
ows 317 27.
kitemId=ES
:/butter
to?action=
opping.co
/butter-
10 -

Integration Highlights - New Relic

- ▶ Splunk Reports in New Relic Insights to correlate code-level performance in New Relic, alongside detailed logs that provide additional context; for those using New Relic as their UI, having all the data in one place is valuable
- ▶ Ad-hoc querying of Splunk data to create flexible views of application logs against New Relic metrics and events for mobile, browser and APM
- ▶ Splunk Alerts available in context to APM and infrastructure monitoring via New Relic Insights
- ▶ In the long term, Splunk logs correlated to Transaction traces in APM to give the full context about application performance issues



Integration Example - Media Company

Situation

- ▶ App Dev and newly created “Dev Ops” teams have been the primary “buyer” for New Relic
- ▶ Operations team has been the primary “buyer” for Splunk
- ▶ Both teams would get more value by seeing monitoring data across entire environment

Splunk + New Relic

- ▶ Allows Operations team to see End User Monitoring and app server metrics alongside infrastructure components they are measuring
- ▶ DevOps teams can ad-hoc query Splunk and get events from Splunk, offering better insight into how infrastructure impacts the apps they are responsible for



What should you do next?



Have your New Relic license key?



Install the [Splunkbase plug-in](#)



See pre-built dashboards in Splunk.

Send Splunk Alerts to New Relic Insights

130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D15L9FF1ADFF3 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FI-5W-03"
128.241.220.82 - - [07/Jan 18:10:57:123] "GET /product.screen?product_id=FL-DSH-01&JSESSIONID=5D35L7FF6ADFF9 HTTP 1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=purchase&itemId=EST-268product_id=KQ-CW-01"
10.0.0.1 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D5L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D5L9FF1ADFF3"
10.0.0.1 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D5L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D5L9FF1ADFF3"
10.0.0.1 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D5L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D5L9FF1ADFF3"
10.0.0.1 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D5L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D5L9FF1ADFF3"
10.0.0.1 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D5L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D5L9FF1ADFF3"
10.0.0.1 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D5L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D5L9FF1ADFF3"
10.0.0.1 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D5L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D5L9FF1ADFF3"
10.0.0.1 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=5D5L9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=5D5L9FF1ADFF3"

Thank You

Don't forget to **rate this session** in the
.conf2017 mobile app

splunk> .conf2017