



What's new in CA APM

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What's New in CA APM SaaS?

July 2018 Features (8/1)

- UI Updates
 - New Notebook view
 - TT Viewer –Snapshot view
- Agent Updates
 - Attribute Extension
 - Agent support on Java 9
 - Additional CPU Timing/Memory
 - PHP Browser Agent injection
 - Javascript Calculator Phase 1

August Features (8/31)

- Resource Analyst Phase 2 (Assisted Triage – Infra issue)
- APM Infrastructure Agent – Additional docker images to deploy other APM IA extensions
- Developer Mode Enhancements
 - Line of Code (TT viewer)
- Modern Application Support
 - Oracle DB extension
 - Cloud Foundry Phase 2
 - Kafka agent
 - Mulesoft Monitoring agent

Transaction Tracing - Line of Code

Multiple selection > 2000 Business Transactions > 8/30/18 1:16:26 AM (4 ms) DataEngine|URLs|dataengine/api/ - 8/30/18 1:16:26 AM - 4ms - 35 components

Search X 0/0

0 ms 1 ms 2 ms 3 ms 4 ms 5 ms 6 ms 7 ms 8 ms 9 ms

TokenService|URLs|api/v1/ - 8/30/18 1:16:26 AM - 9ms - 47 components

Frontends|Apps|TokenService|URLs|api/v1/ (ServletContainer.java:216)

Servlets|ServletContainer (ServletContainer.java:216)

org.glassfish.jersey.servlet.ServletContainer::service (ServletContainer.java:254)

org.glassfish.jersey.server.ServerRuntime\$2::run (ServerRuntime.java:311)

WebServices|Server|token/login/login (TokenResource.java:33)

com.unfit.token.service.TokenService::login (TokenService.java:39)

java.net.HttpURLConnection::getResponseCode (HttpURLConnection.java:469)

Backends|WebService at http://dataengine_8080 (HttpURLConnection.java:1458)

Backends|WebService at http://dataengine_8080/Paths|dataengine/api/ (HttpURLConnection.java:1458)

sun.net.www.protocol.h...

DataEngine|URLs|dataengine/api/ - 8/30/18 1:16:26 AM - 4ms - 35 components

TokenService|URLs|api/v1/ - 8/30/18 1:16:26 AM - 9ms - 47 components (Duration:9 ms)

Tree

Timestamp	Duration	Percent	Invocations	Source Line	Path
8/30/18 1:16:26:764 AM	9 ms	100.00	1	ServletContainer.java:216	Frontends Apps

Line of Code is found in 3 places

Trace Summary

Method: javax.servlet.http.HttpServlet.service (javax.servlet.http.HttpServlet.service)

Remote Client Address: 172.18.0.8

Resource Name: Frontends|Apps|TokenService|URLs|api/v1/

Scheme: http

SeqNoCrossProcessData: 1

Server Host IP: 172.18.0.7

Server Name: tokenservice

Server Port: 7010

Source Line: ServletContainer.java:216

TTPlugin.globalAttribute.containerId: 3350dca3e0f4ad544a573407fc92233dd47d970803c7bb584ac62a2933eb7f5a

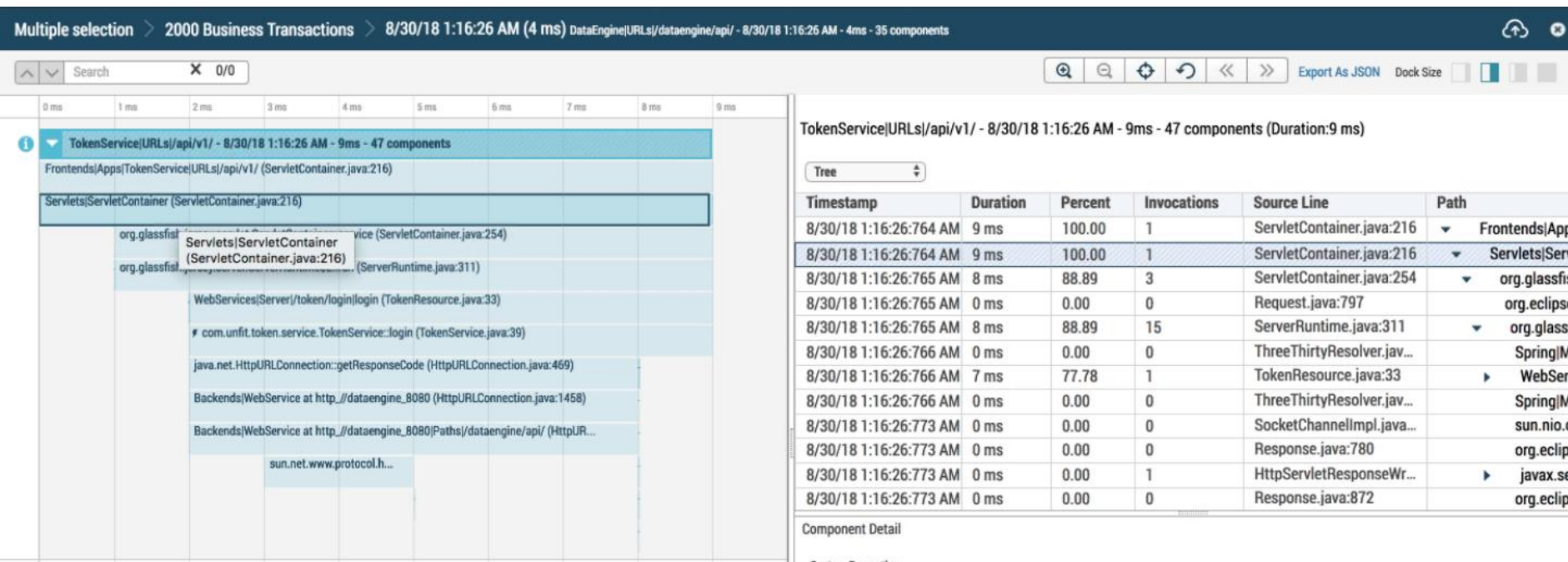
Thread Group Name: main

Thread Name: qtp828447060-31

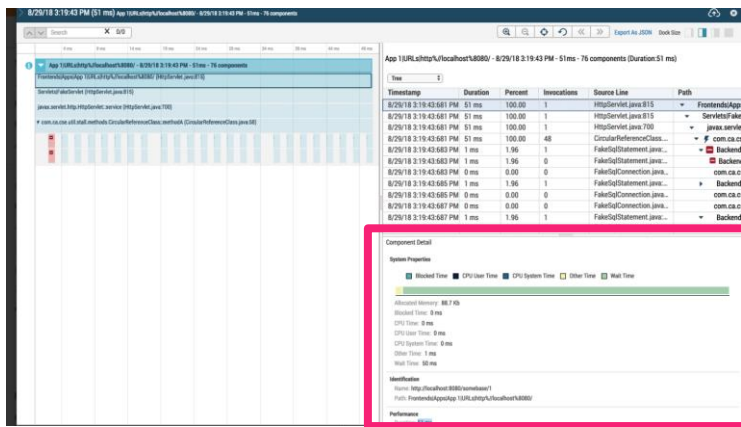
Trace Type: Sampled

TransactionId: 8770420EAC1200074D008C09145B4D272814

Transaction Tracing - Line of Code



Transaction Tracing - Systems Properties



ReportingService|URLs|Default - 8/23/18 1:34:57 AM - 242ms - 12 components (Duration:242 ms)

System Properties

Total CPU Time	User CPU Time	System CPU Time	Wait Time	Blocked
2 ms	0.83%	0 ms	0%	2 ms
2 ms	0.83%	0 ms	0%	2 ms

Component Detail

System Properties

Blocked Time CPU User Time CPU System Time Other Time Wait Time

Allocated Memory: 88.7 Kb

Blocked Time: 0 ms

CPU Time: 0 ms

CPU User Time: 0 ms

CPU System Time: 0 ms

Other Time: 1 ms

Wait Time: 50 ms

Identification

Name: http://localhost:8080/somebase/1

Path: Frontends/Apps/App 1|URLs|http://localhost:8080/

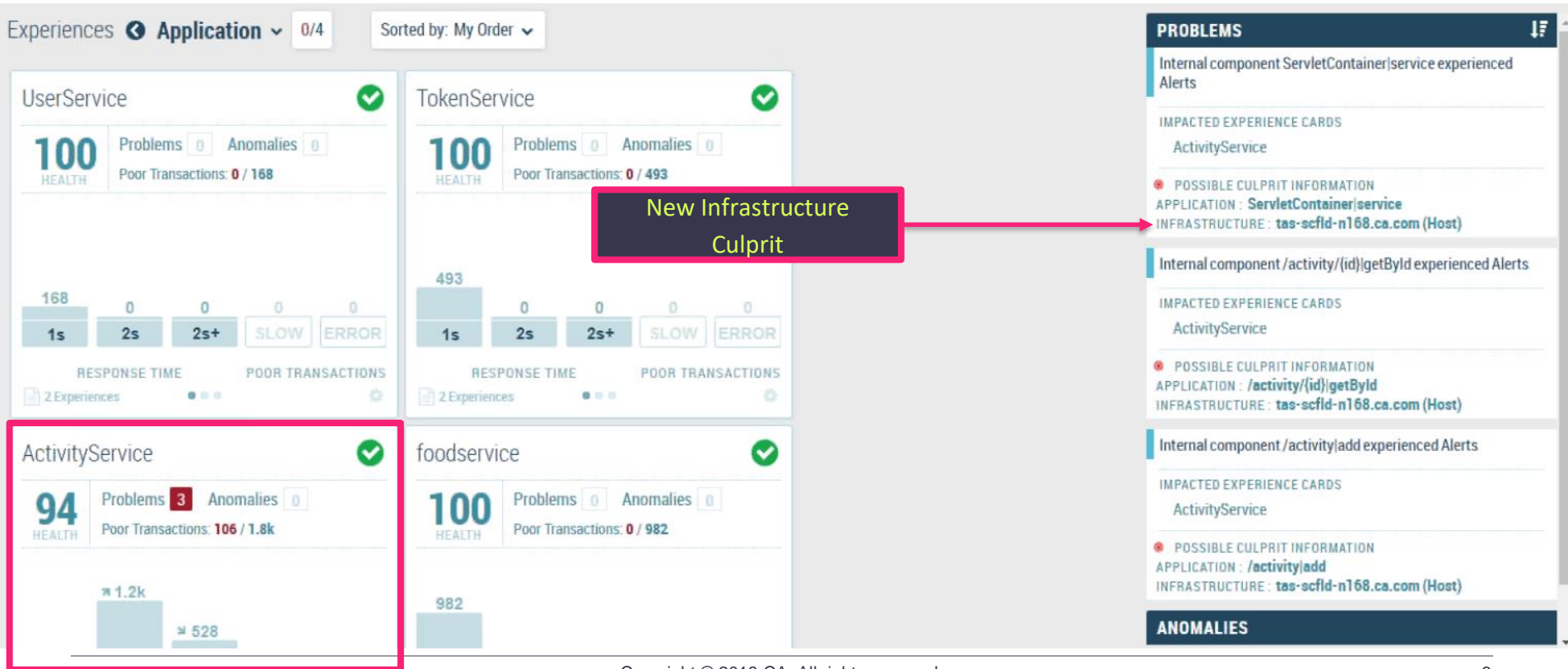
Performance

Duration: 51 ms

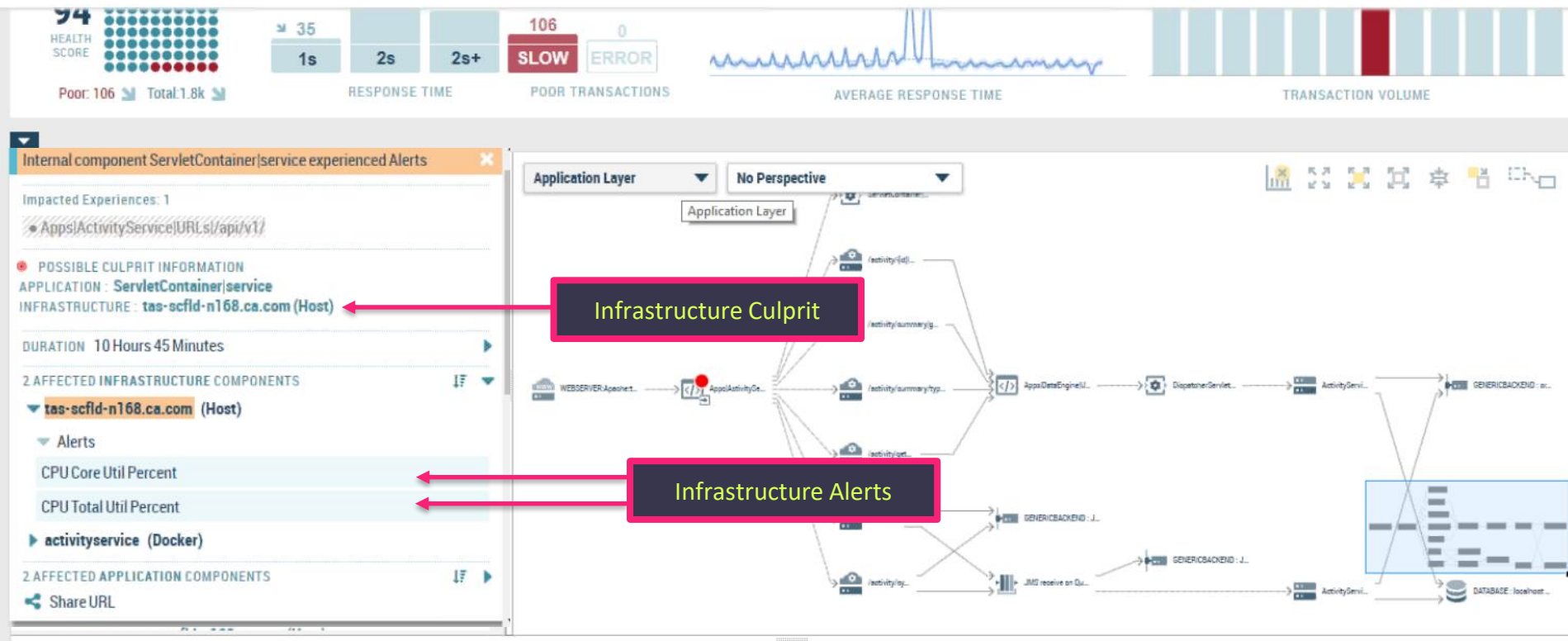
New Systems Properties

- System properties are available for front end services

Assisted Triage – Infrastructure Culprit

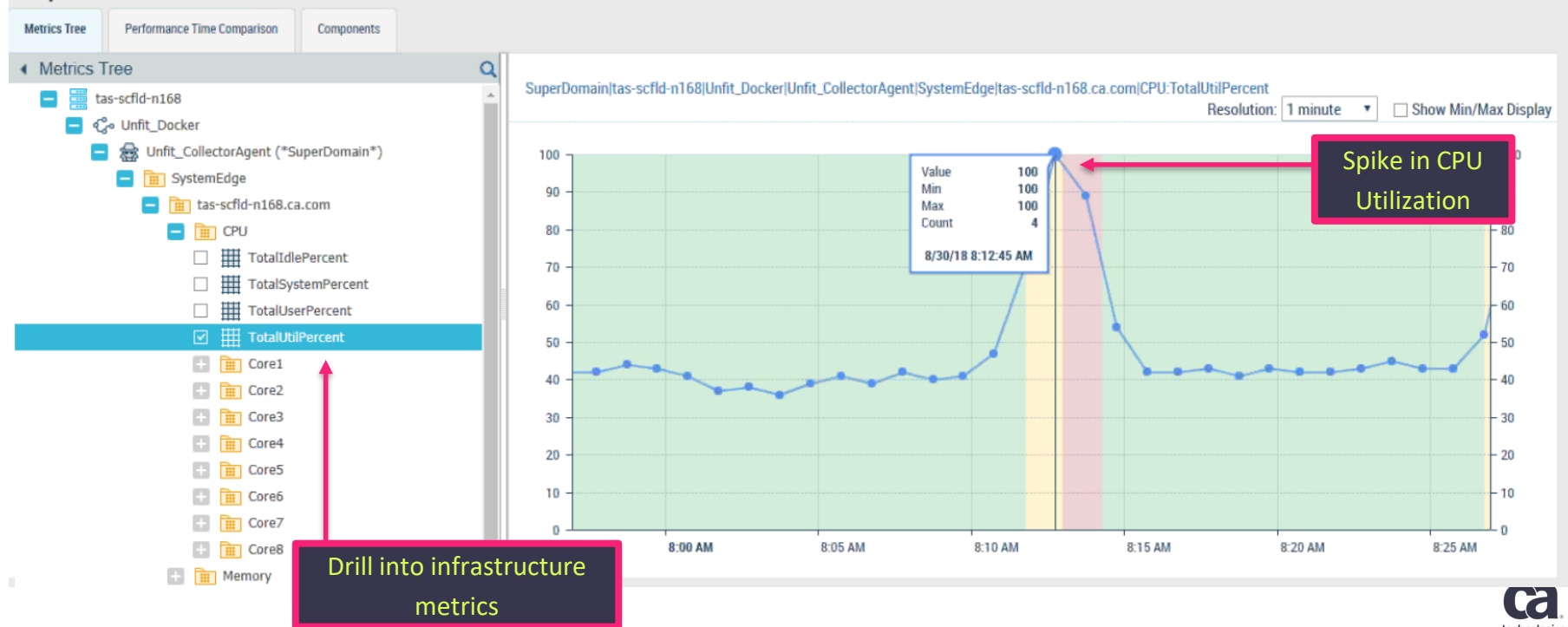


Assisted Triage – Infrastructure Culprit

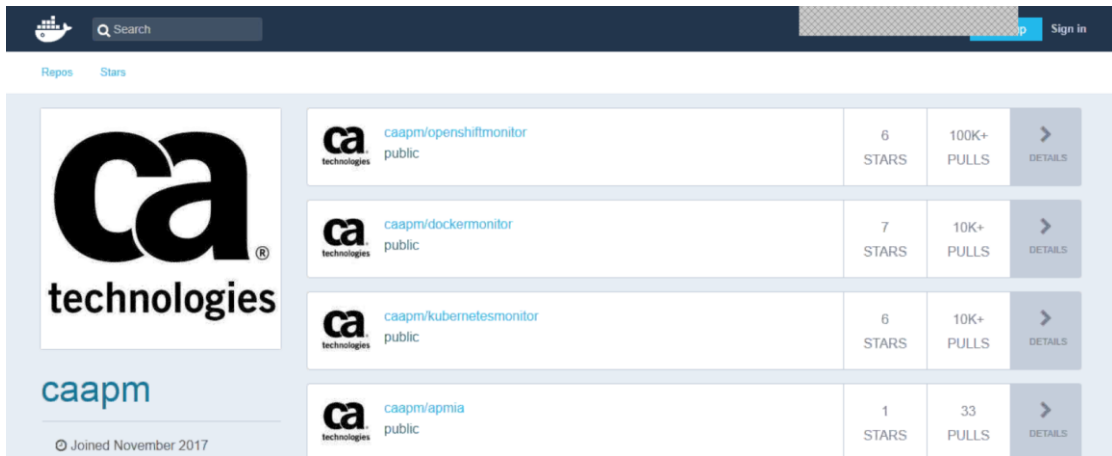


Assisted Triage – Infrastructure Culprit

Components Overview



APM Infrastructure Agent – Docker Deployment



The screenshot shows the GitHub repository page for CA Technologies. The left sidebar features the CA Technologies logo and the text 'caapm' with 'Joined November 2017'. The main content area displays a table of repositories:

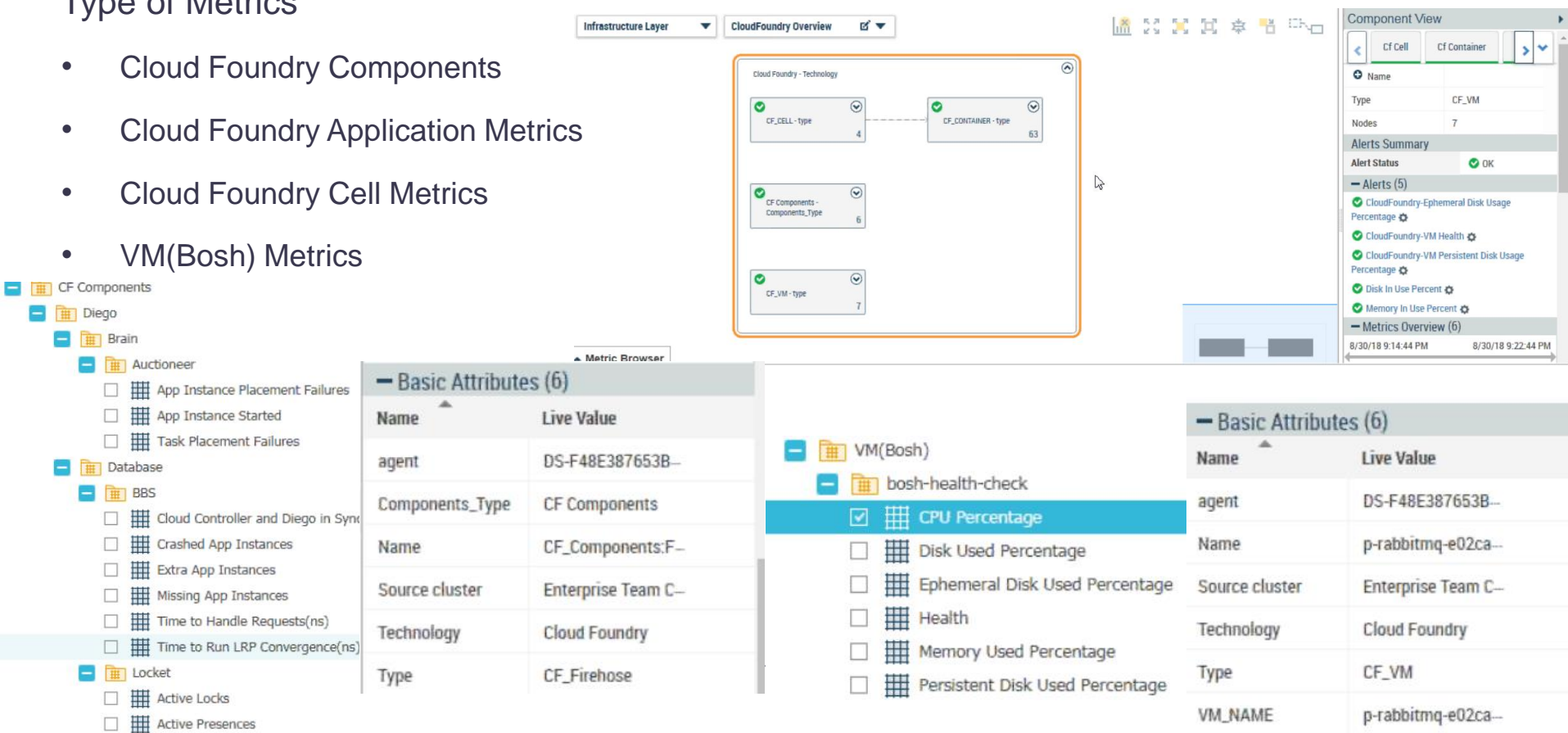
Repository	Stars	Pulls	Details
caapm/openshiftmonitor public	6 STARS	100K+ PULLS	DETAILS
caapm/dockermonitor public	7 STARS	10K+ PULLS	DETAILS
caapm/kubernetesmonitor public	6 STARS	10K+ PULLS	DETAILS
caapm/apmia public	1 STARS	33 PULLS	DETAILS

- APM Infrastructure Agent now available as a docker container
- Easily deploy using Swarm/Kubernetes
- Support for Azure/AWS, OpenShift, Docker
- Available to download from Docker Marketplace

Extensions – Cloud Foundry

Type of Metrics

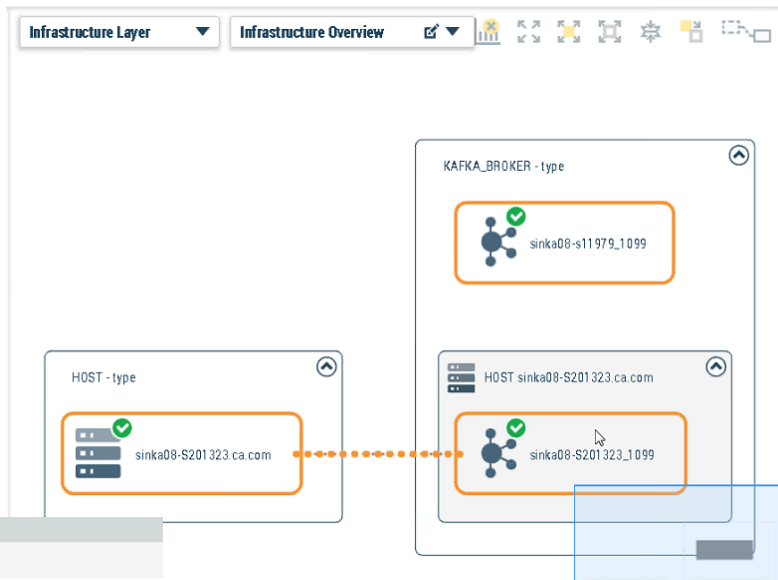
- Cloud Foundry Components
- Cloud Foundry Application Metrics
- Cloud Foundry Cell Metrics
- VM(Bosh) Metrics



Kafka Infrastructure Agent

- Discovery of Kafka Broker and host
- 10 Metrics Collected
 - Total messages
 - Payload metrics
 - Offline partitions
 - Under Replicated Partitions
 - Active Controller count

Basic Attributes (9)	
Name	Live Value
agent	sinka08-S201323\InfrastructureAgent
Hostname	sinka08-S201323
ipaddress	127.0.1.1
kafka_endpoint	sinka08-S201323_1099
layer	INFRASTRUCTURE
Name	sinka08-S201323_1099
Source cluster	Enterprise Team Center
Type	KAFKA_BROKER
zookeeper_host	sinka08-S201323



Component View

Alert Status OK

Alerts (4)

W2K8SYS058IATC:SuperDomain.Default:Kafka - OfflinePartitionsCount

W2K8SYS058IATC:SuperDomain.Default:Kafka - Server Status

W2K8SYS058IATC:SuperDomain.Default:Kafka - UncleanLeaderElections Per Interval

W2K8SYS058IATC:SuperDomain.Default:Kafka - UnderReplicatedPartitions

Metrics Overview (10)

8/30/18 8:51:36 AM 8/30/18 8:59:36 AM

Kafka Broker Metrics

UnderReplicatedPartitions

PartitionCount



Container Monitoring

Rising Docker Popularity

52%

WE'RE JUST GETTING STARTED

25%

WE USE IT FOR SMALL PROJECTS AND EXPERIMENTAION, BUT NOT FOR PRODUCTION APPLICATIONS

23%

WE ARE RUNNING CONTAINERS IN PRODUCTION

Use of Docker container technology is just getting started at 52 percent of surveyed organizations.

The rest are almost evenly divided between using the technology outside of production (25 percent) and running containers in production (23 percent).

12M



Docker Hosts

900K



Dockerized Apps

14B



Docker Image Pulls

170K



Meetup Members

¹ 7 Trends in Container Monitoring, data based on Gatepoint Research Study, "trends in Container Monitoring" Conducted between March and May 2018

² DockerCon Keynote presentation 2017

Do You Know the Impact of Container Performance?

How do Docker container performance problems affect your business?

17%

SUB-OPTIMAL SERVICE

18%

DEPLOYMENT DELAYS

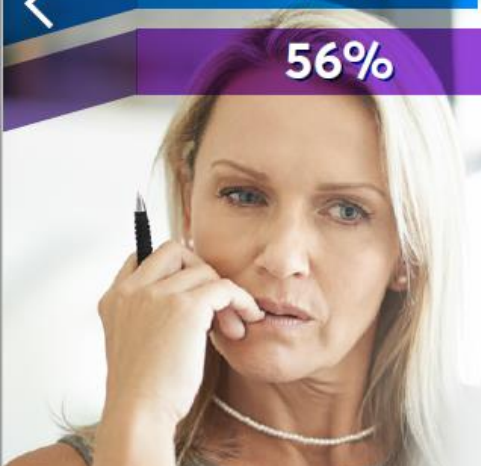
19%

LONGER TRIAGE TIMES

56%

NOT MONITORING CONTAINERS FOR BUSINESS IMPACT YET

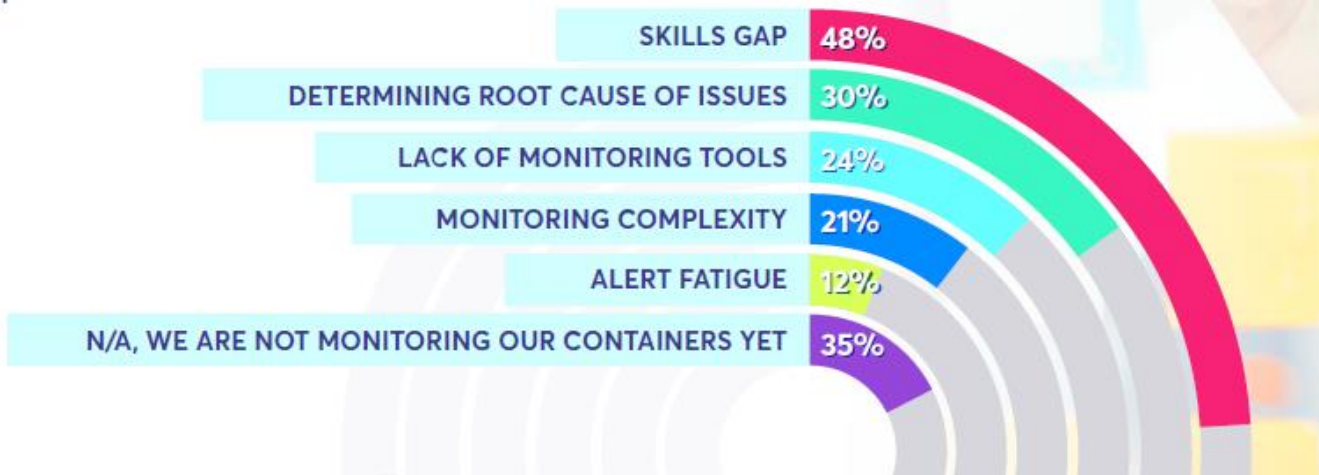
More than half of respondents are not monitoring Docker container performance problems for business impact yet, but those who are experience sub-optimal service (17percent), have deployment delays (18 percent) and are suffering from longer triage times (19 percent).



Why is it so Difficult?

What problems does your organization face with monitoring Docker containers?

The most prevalent issue with monitoring Docker containers is the gap in skills, 48 percent of respondents say. It's difficult to determine the root cause of issues, too, say 30 percent, and 24 percent say they lack the tools to monitor.



CA's Essentials of Container Monitoring



Complete Visibility

Provides a single-source of truth into performance across complex containerized apps, with an open data model contextually serving critical information to DevOps teams.

[Learn more](#)



Change Analysis

Determines how even the smallest container changes –in apps, code and architecture—can impact application performance, for better or for worse.

[Learn more](#)



Actionable Intelligence

Dynamic baselining pinpoints signals in the container noise, with proven statistical models, analytics and automated workflows rapidly determining the exact root cause.

[Learn more](#)



Flexible Monitoring

Gathers critical container metrics, flows and dependencies with minimal effort and configuration and scales to support more complex systems with deeper instrumentation and tracing.

[Learn more](#)

Demo



Questions?





Thank You.