DevOps Pay Raise

Quantifying your value to move up the ladder

TOM LEVEY

Tech Evangelist

AppDynamics

@tlevey

DevOps?

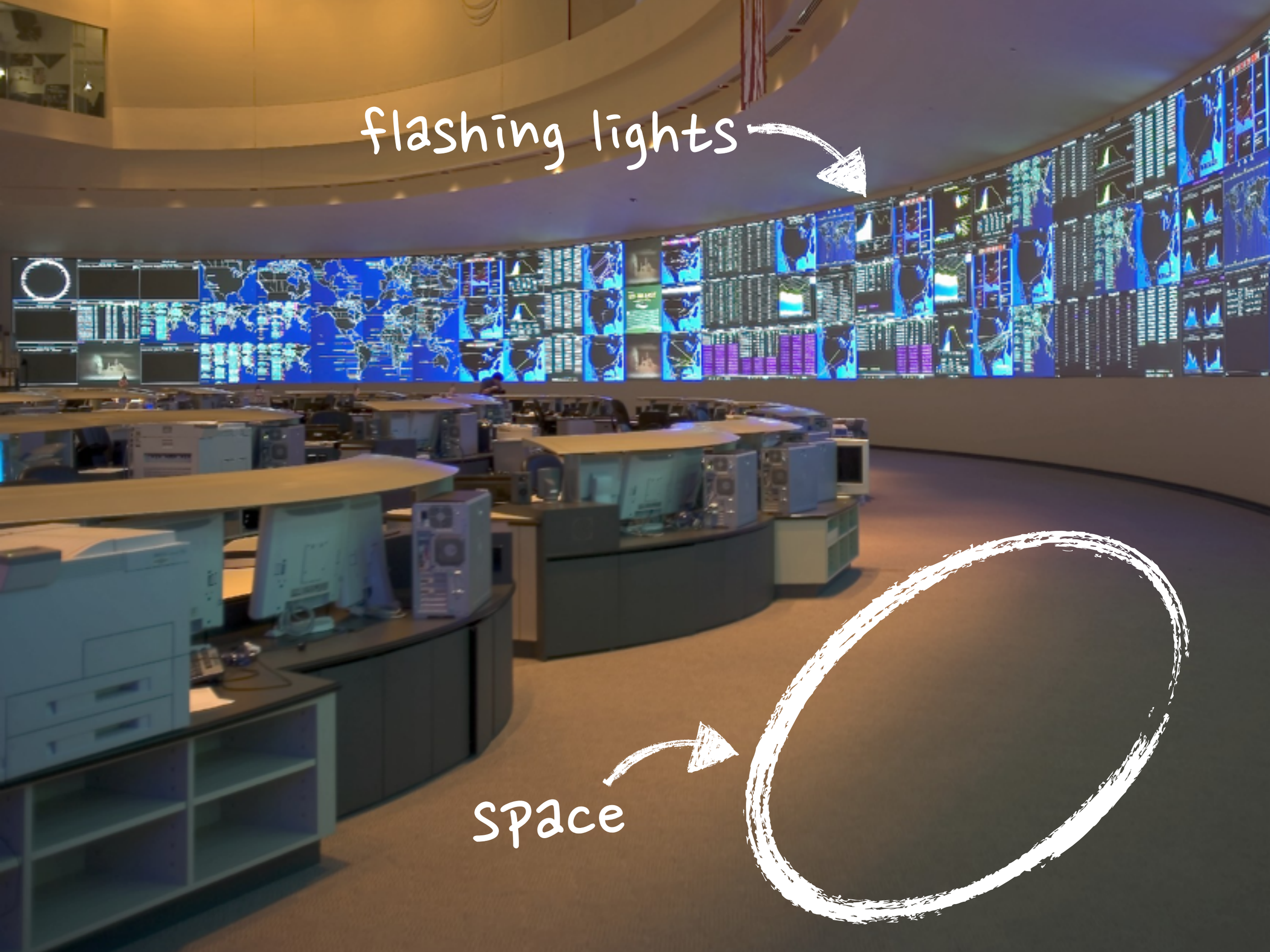
Developers working together with **Operations** to get things done **faster** in an **automated** and **repeatable** way

DevOps Success?

2005

Portal-services & handset testing

my desk


flashing lights
space

IREG

International Roaming Expert Group

International roaming

germany network

portal services

voice calls

messaging

france network

network backbone

signaling

norway network

spain network

video calls

italy

Runbook

1. Call L2 ops team
2. Call infrastructure ops
3. Call signaling partner
4. Call radio ops
5. Call backbone provider
6. Call international L2 ops team
7. Wait for reply...
8. Repeat 1-7 until resolution

WORKED FINE IN DEV
OPS PROBLEM NOW
quickmeme.com

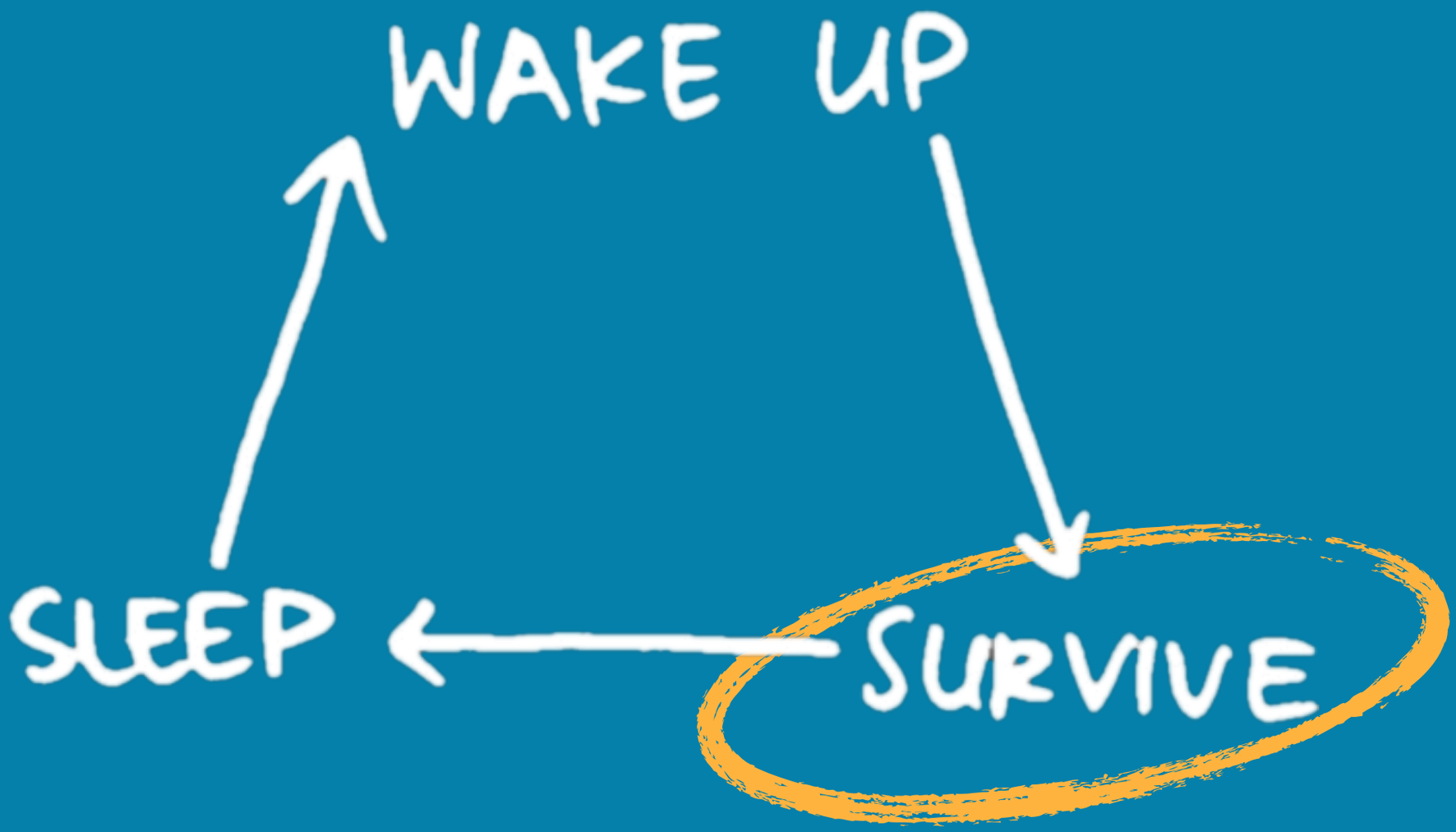
OPS:

“Everything is fine from our end.”

Typical Day

1. Open 30 new tickets
2. Make 200 phone calls
3. Attend executive P1 status update meeting
4. Argue about what a P1 and P2 really is
5. Reprioritize P2 tickets to P1
6. Reprioritize P3 tickets to P2
7. Close tickets as *'Cannot reproduce'* or *'Duplicate'*

What did I care about?



What did I really care about?

BI's
PI's
SLA's

What did the Business care about?

PI = €

Even though the business could never prove it.

How the Business really viewed me

How L2 & L3 Support viewed me

How Ops & Partners viewed me

False Alarms

404 Errors

Site is down

My search is slow

2am Friday - #FFS

We have had an alert that the load on one of your staging servers is critical.

How much time do false alarms waste?

Role	Hours Per Week	Cost Per Week	Cost Per Year
Me	20	€400	€20,800
L2	10	€200	€10,400
L3	15	€300	€15,600
Hosting	6	€120	€6240
Network	6	€120	€6240
CMS	10	€200	€10,400
Total	**55**	**€1,340**	**€69,680**

Conservative estimates assuming €20/hour

How much revenue did the business lose?

Typical Day

1. Open 30 new tickets
2. Make 300 phone calls
3. Attend executive P1 status update meeting
4. Argue about what a P1 and P2 really is
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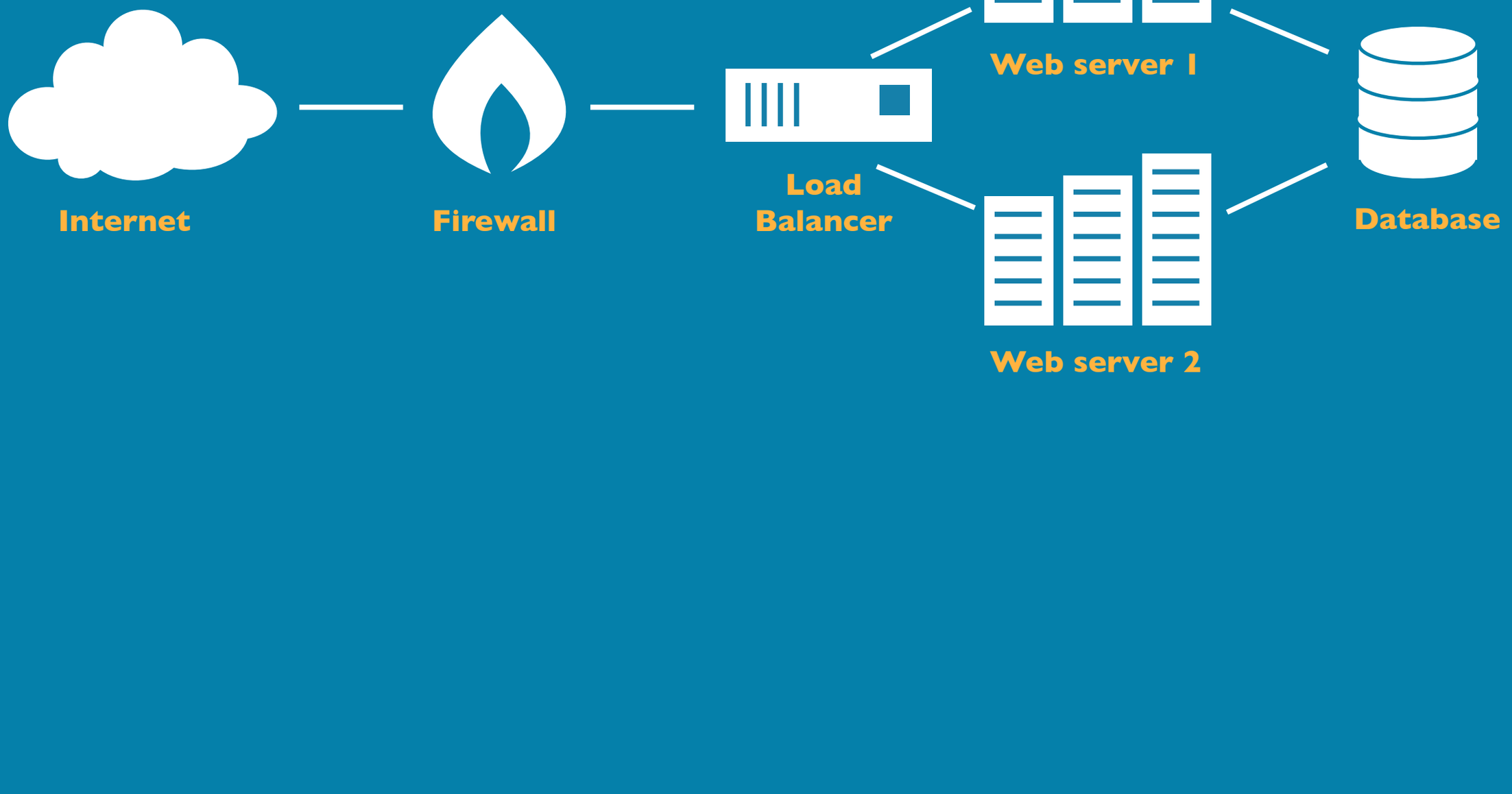
Things I wish I'd had

1. Automation
2. Collaboration
3. Better Tooling
4. Business Metrics

Things I wish I'd done

1. Baseline where I started
2. Measured my progress
3. Calculated Business Impact
4. Promote success not problems
5. Proved my value

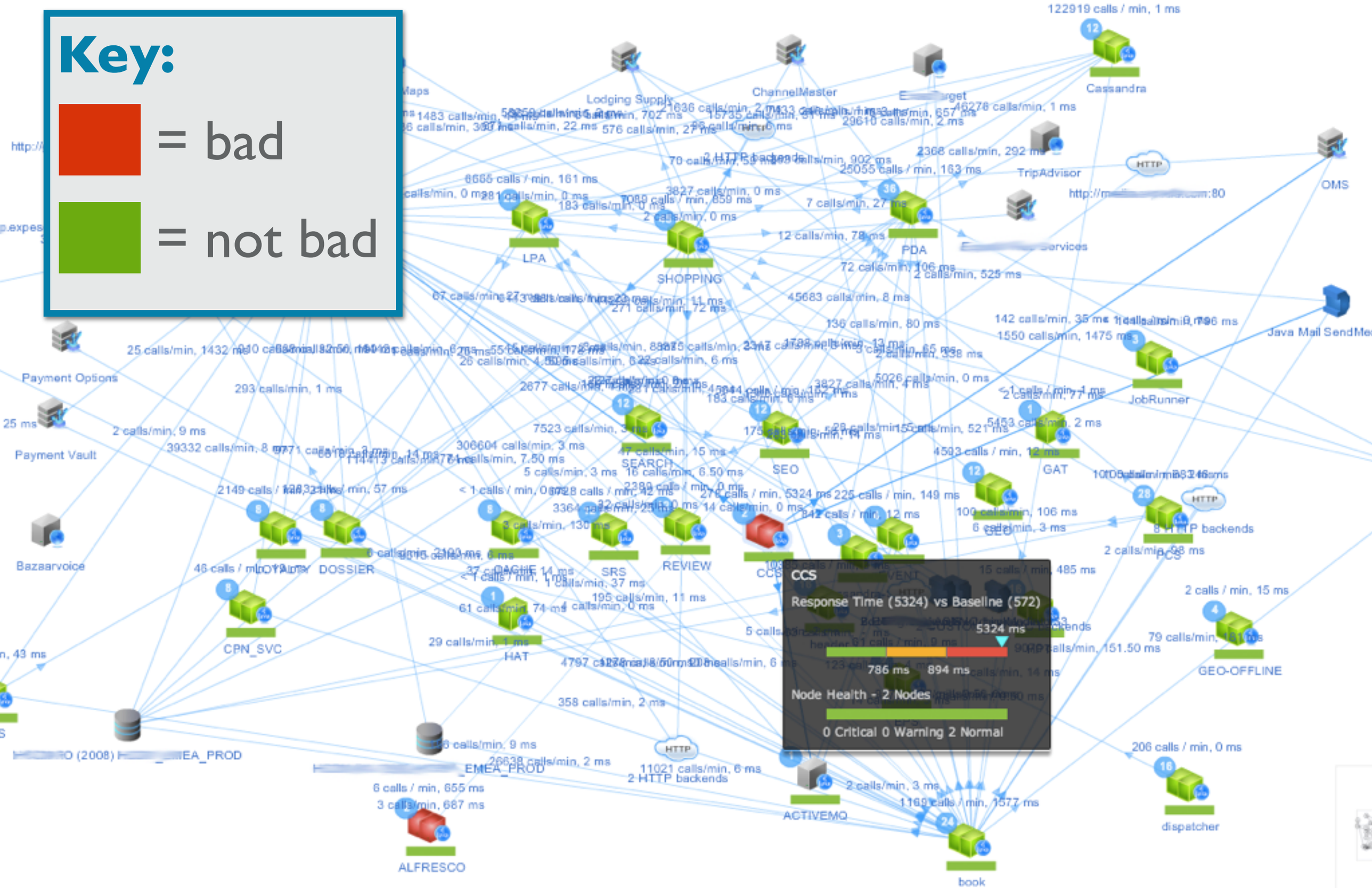
Present Day


Internet
Firewall
Load Balancer
Web server 1
Web server 2
Database

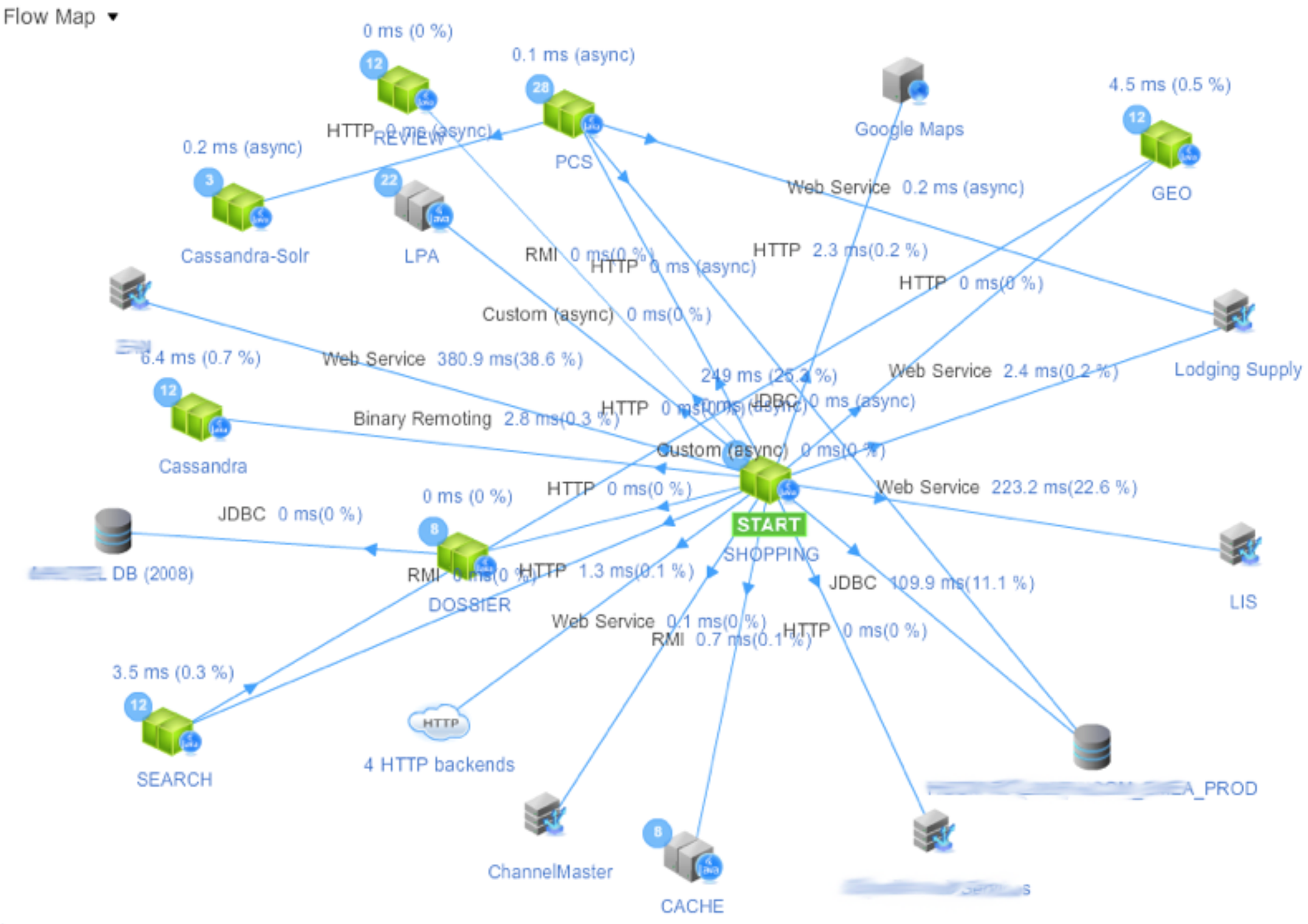
Key:

= bad

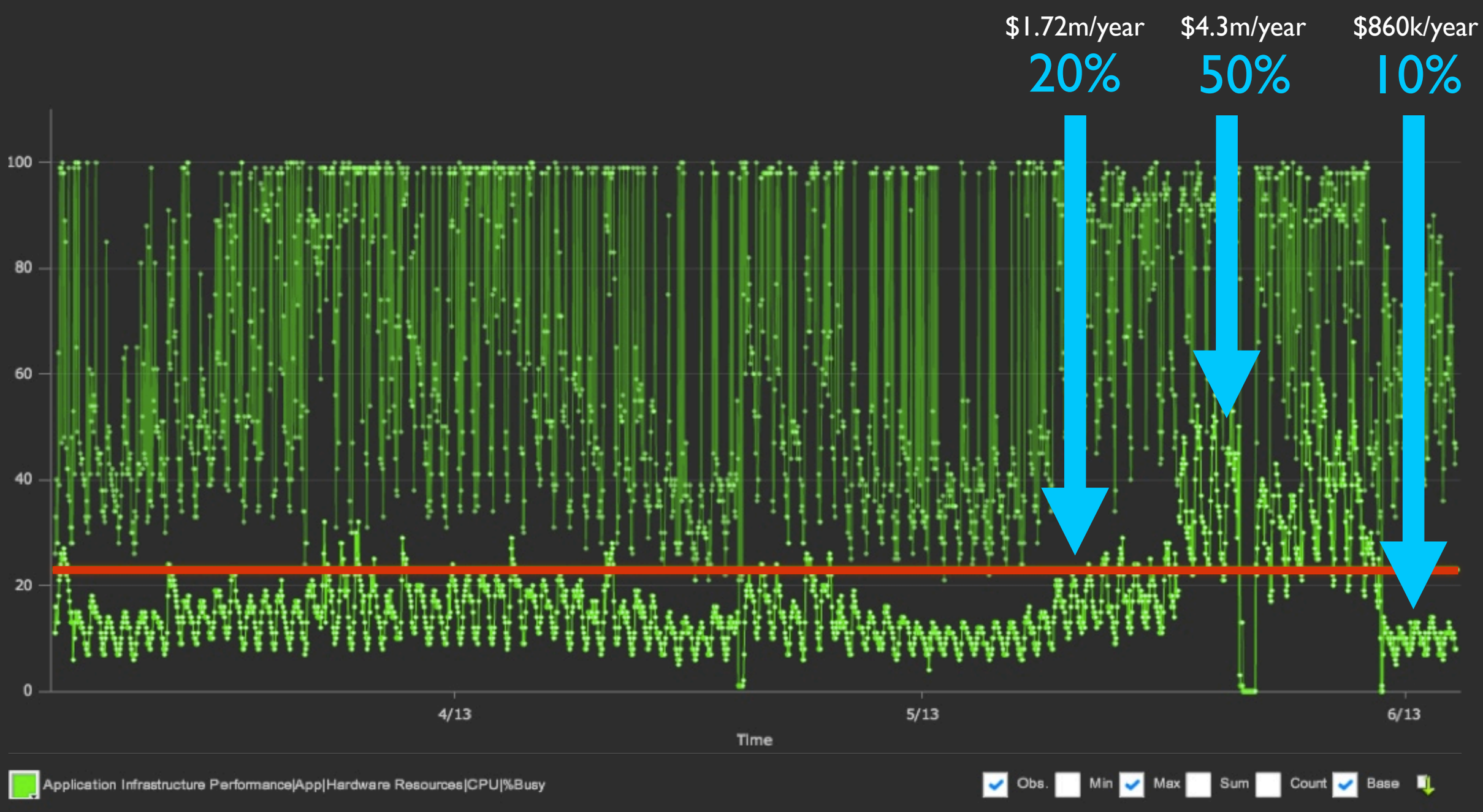
= not bad



A simple travel search...



How much are you going to **spend** in the Cloud?



Assume $1 per server/hour and 1,000 Servers for the application.

tools can be helpful

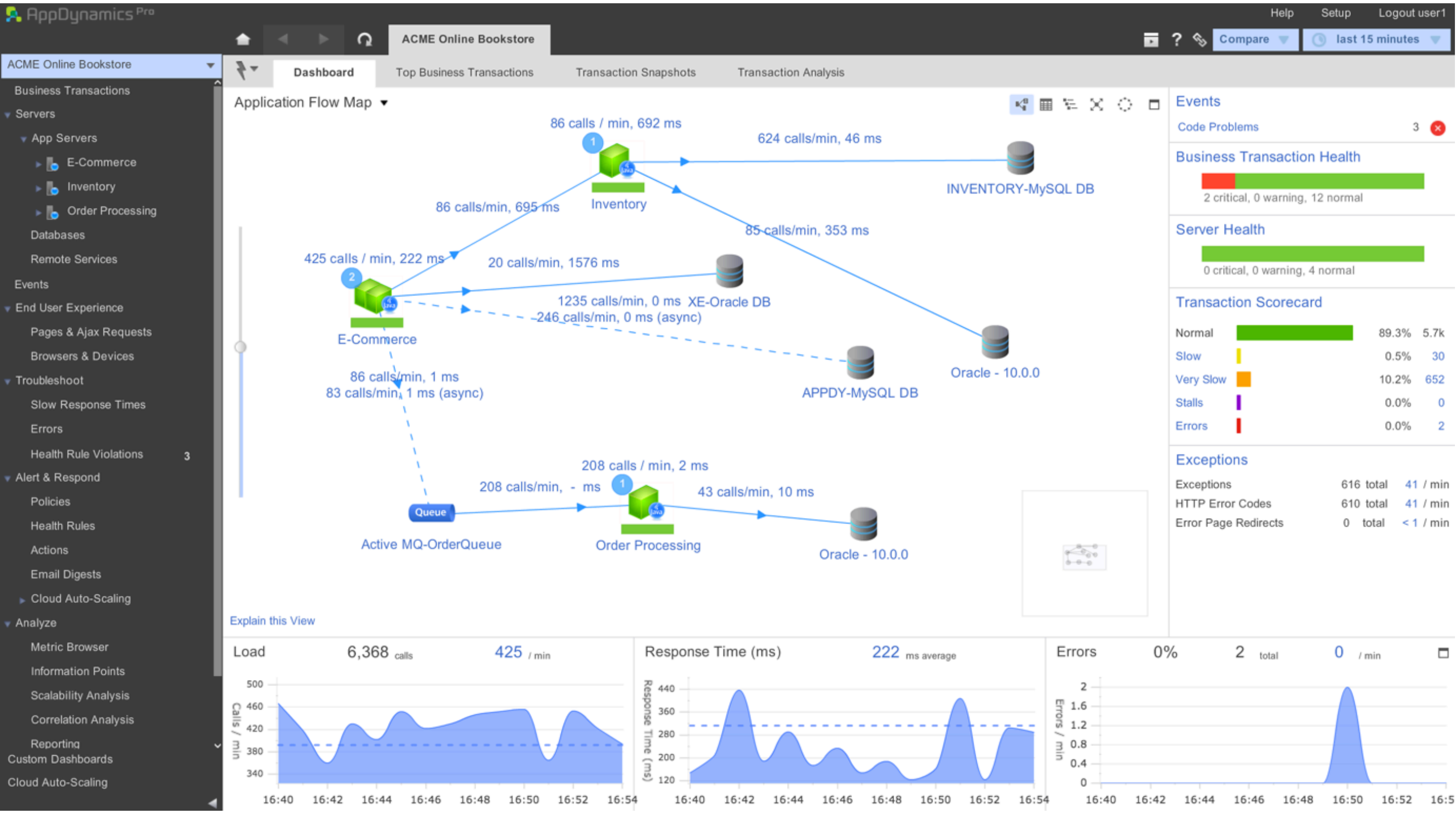
right tools

right hands

right use

Automatically map your application

AppDynamics



Executed code diagnostics

AppDynamics

Call Drill Down. Exe Time: 10355 ms Timestamp: 07/10/13 16:58:18 BT: Checkout GUID: bae1191d-86af-44c2-a593-e429bfabd5af

SUMMARY
PARTIAL CALL GRAPH
HOT SPOTS
SQL CALLS
HTTP PARAMS
COOKIES
USER DATA
ERROR DETAILS
HARDWARE / MEM
NODE PROBLEMS
ADDITIONAL DATA

Execution Time: **10355 ms**. Node **E-Commerce-Node-8000** . Timestamp: **07/10/13 16:58:18** .

This is a Partial Call Graph

Set as Root | Reset Root | (?) | Show Filters

Name	Time (ms)		Exit Calls / Threads *
java.lang.Thread:run:679	0 ms (self)	0 %	
StrutsActionProxy:execute:50	0 ms (self)	0 %	
Struts Action - ViewCart:sendItems:186	0 ms (self)	0 %	
Proxy For Spring Bean - cartServiceTarget:checkOut	0 ms (self)	0 %	
Proxy For Spring Bean - cartServiceTarget:invoke	0 ms (self)	0 %	
Spring Bean - cartServiceTarget:checkOut:40	0 ms (self)	0 %	
Spring Bean - soapUtil:raisePO:28	0 ms (self)	0 %	
com.appdynamics.inventory.OrderServicePortTypeProxy:createOrder:54	0 ms (self)	0 %	
com.appdynamics.inventory.OrderServiceSOAP11BindingStub:createOrder:158	10345 ms (self)	99.9 %	Web Service
Spring Bean - messageProducer:sendMessageWithOrderId:30	0 ms (self)	0 %	
Spring Bean - proucerJmsTemplate:send:469	0 ms (self)	0 %	
Spring Bean - proucerJmsTemplate:send:477	0 ms (self)	0 %	
Spring Bean - proucerJmsTemplate:execute:430	0 ms (self)	0 %	
Proxy For Spring Bean - proucerJmsTemplate:doInJms:479	0 ms (self)	0 %	
Spring Bean - proucerJmsTemplate:doSend:513	0 ms (self)	0 %	
Spring Bean - proucerJmsTemplate:doSend:536	1 ms (self)	0 %	JMS
Spring Bean - messageProducer:sendTextMessageWithOrderId:43	0 ms (self)	0 %	
Spring Bean - proucerJmsTemplate:send:469	0 ms (self)	0 %	
Spring Bean - proucerJmsTemplate:send:477	0 ms (self)	0 %	
Spring Bean - proucerJmsTemplate:execute:430	0 ms (self)	0 %	
Proxy For Spring Bean - proucerJmsTemplate:doInJms:479	0 ms (self)	0 %	
Spring Bean - proucerJmsTemplate:doSend:513	0 ms (self)	0 %	
Spring Bean - proucerJmsTemplate:doSend:536	2 ms (self)	0 %	JMS

Export to PDF

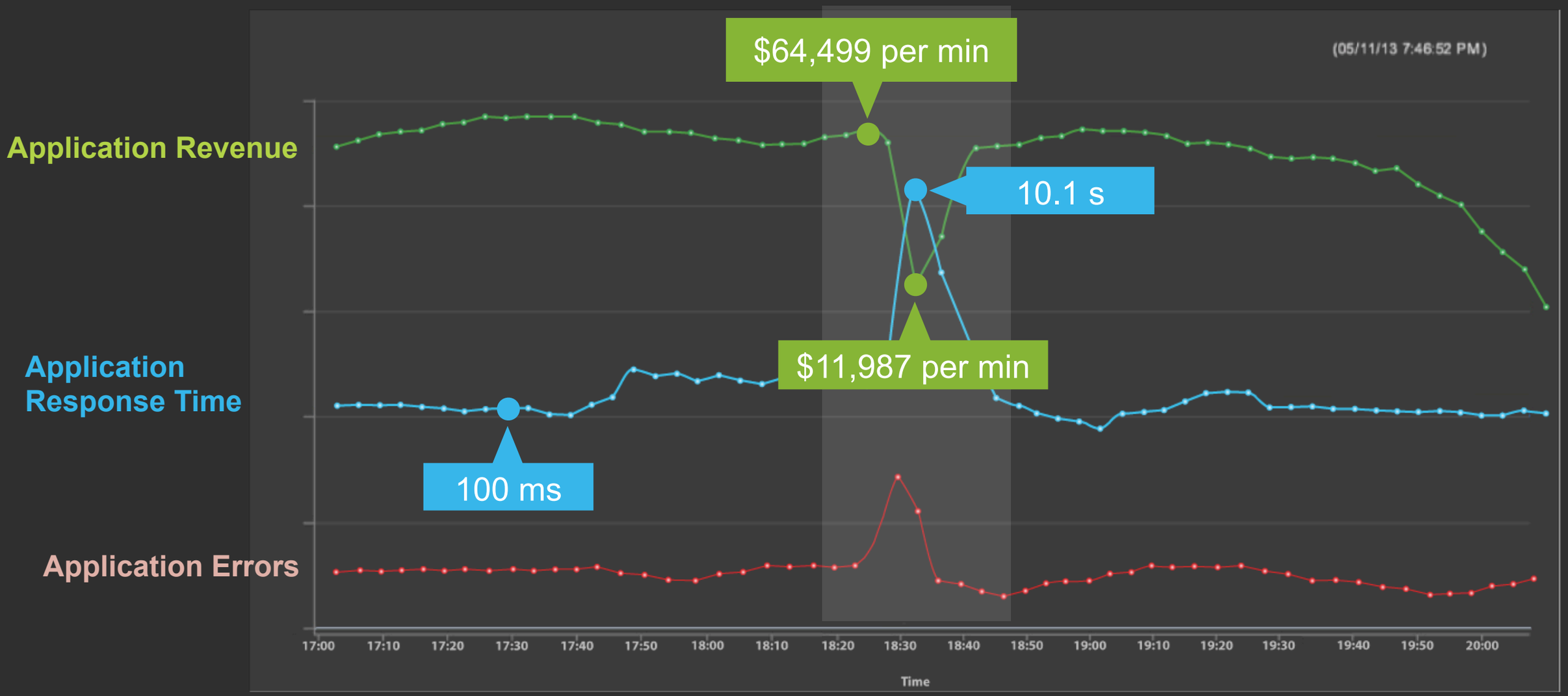
Close

Some **packages have been excluded** from this Call Graph

* SQL Calls under 10ms are not shown here

Correlate business metrics with your metrics

AppDynamics



* Screenshot from US e-Commerce AppDynamics Customer

Automation = ??

Time is Money.

Infrastructure automation

How much time and € do these tools save?

Deployment automation

Jenkins

Capistrano

Fabric

How much time and € do these tools save?

Monitoring tools

Graphite

AppDynamics

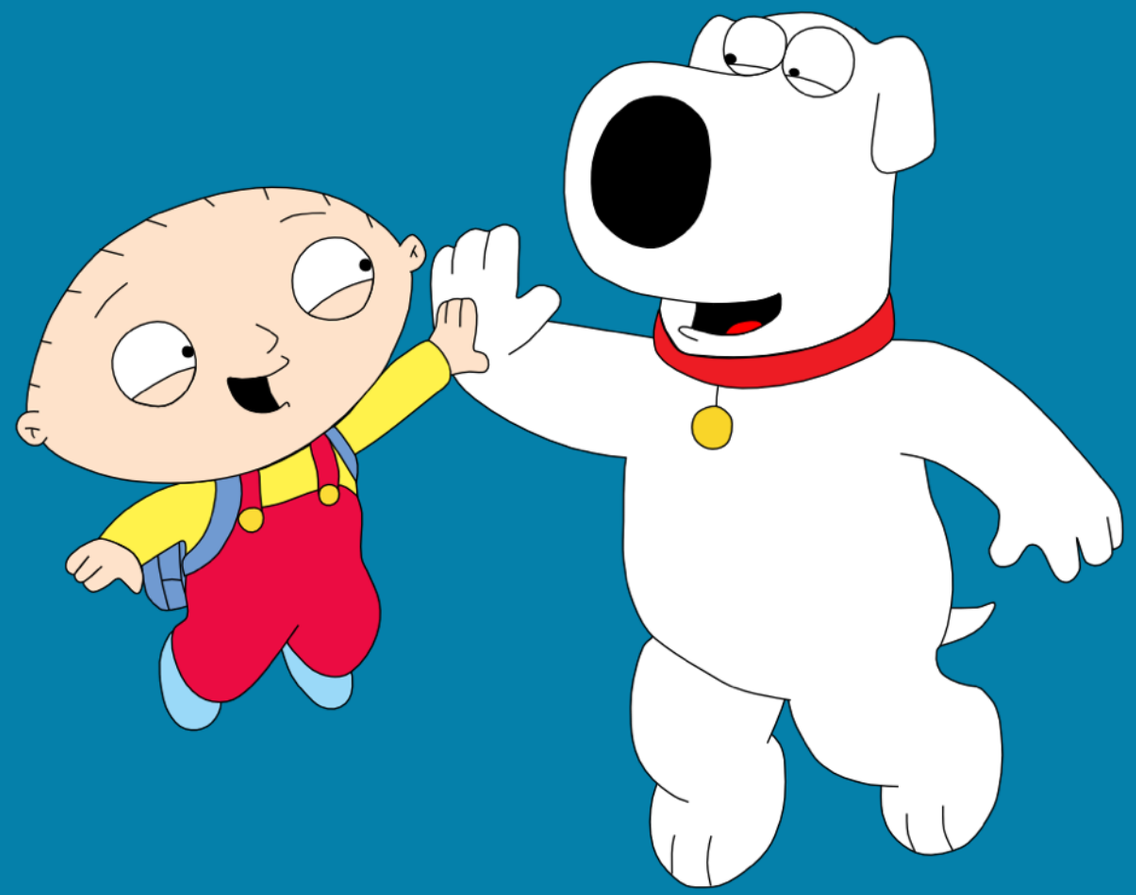
Nagios®

sensu

boundary

How much time and € do these tools save?

Collaboration = ??



Productivity saves time
Time is money.

DevOps Tasks	Annual Cost €	Annual Benefit €
Infrastructure Automation	?	?
Deployment Automation	?	?
Log Automation	?	?
Monitoring	?	?
Collaboration	Pride	?
Total	**X**	**Y**
Your DevOps Value	**€ Y - X**	

DevOps

Automation & collaboration = Time = Money

Tell the Business how much you save them.

AppDynamics

Free trial: appdynamics.com/freetrial

BERLIN
INTERNATIONAL
SOFTWARE DEVELOPMENT
CONFERENCE 2013

goto; conference

Training:Oct 15-16 / Conference:Oct 17-18