

AUTOMATED
SOFTWARE TESTING
AND QUALITY



Hosted by  **PARASOFT**

Cox Automotive

Dealertrack 

Roya Montazeri

Cox Automotive

NEXTGEAR
CAPITAL™

Dealertrack 

 **F&I Express**

vAuto
LIVE MARKET VIEW

 **Manheim**

VinSolutions

PIVOT

 **Kelley Blue Book**

 **HOMENET**
AUTOMOTIVE

 **RideKleen**

Autotrader 

 **xtime**

 **CLUTCH**
COX AUTOMOTIVE / MOBILITY

Virtual Services



App Submit

Queues and network routing rules

Virtualized Assets

Credit Decision

Credit Bureau

Contract Verification

Contract Funding

Vin Decoding

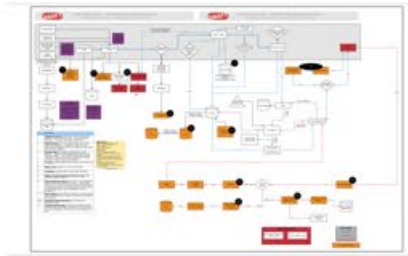
Virtual Responses

Post to Dealertrack

Queues and network routing rules

End user UI display

Our Challenge

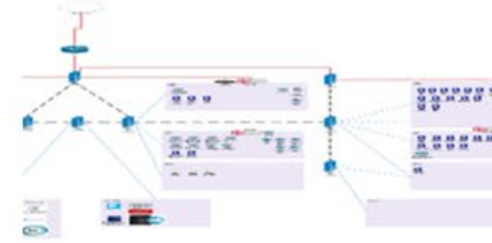


Application

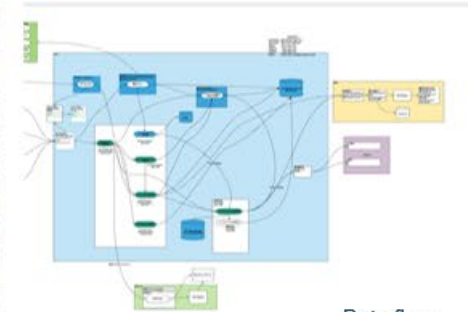


Perfect Storm

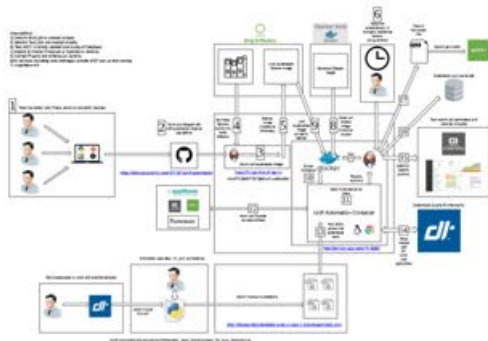
View of the Interstate 35W bridge that collapsed over the Mississippi River in Minneapolis, Aug. 3, 2007. **MORRY GASH/**



platform



Data flow



Test Framework



Process

Our Mission & Focus

Reduce production escaped defects by 5% MoM



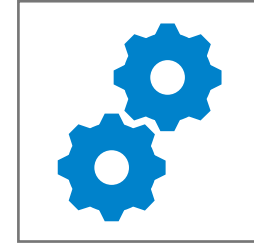
Application Flows

End-to-End Testing
Nonfunctional Testing
Performance Testing



Quality Practices

Quality COE
Test Management
Release Management



Automation

Service Virtualization
Test Data Management
Synthetics

Our Journey



POC

- Small 2-person team
- Implement the tool
- Create the processes for managing virtual assets
- Create the backlog and candidates for virtual assets

Shift Left

- Virtual assets usage extended for development unit testing and demo
- Complex logic added to virtual assets
- Add a new KPI to measure number of defects found using virtual assets

2020

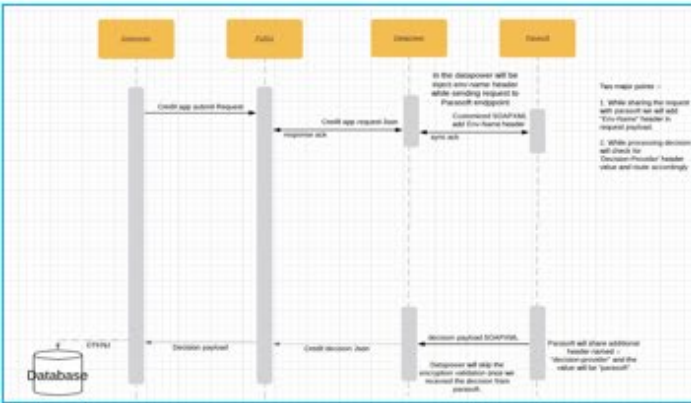
2019

2021

COE

- SMEs training
- Virtual asset creation and deployment
- KPI: Measure number of test runs hitting the virtual assets, and defects
- Engineering training

Solution: Parasoft Virtualization



Test Flow

Table

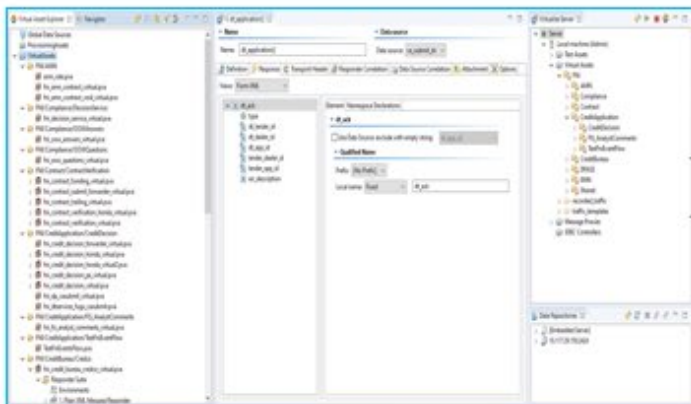
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First row specifies column names

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4	DTB	app	248RW24918M4...	verify	verified	https://dtbpl.com...
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6	DTB	app	348CV18173A03...	verify	warning	https://dtbpl.com...
7	DTB	app	348CV18173A03...	verify	verified	https://dtbpl.com...
8	DTB	app	248RW24918M4...	verify	verified	https://dtbpl.com...
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21	DTB	app	1GTR9CKK6LZ15...	verify	verified	https://dtbpl.com...

Env. Agnostic



Parasoft VA

Credit Decisions

[Submit to Other Lenders](#) [Print Completed Application](#)

Lender Key

Approved

DT TEST BALANCER

Amount: \$18,200.00
Buy Rate: 2.330%
Term: 60 mos
Payment: \$841.47

DIGITAL

[View Details](#)

Declined

DDS Test

Amount: \$18,200.00
Buy Rate: 2.330%
Term: 60 mos
Payment: \$841.47

[View Details](#)

Approved

CC Plus Test

Amount: \$18,200.00
Buy Rate: 4.180%
Term: 60 mos
Payment: \$841.47

CHOICE

[View Details](#)

Bank of America
Merrill Lynch

Transmitting

Bank of America

Amount: --
Buy Rate: --
Term: --
Payment: --

[View Details](#)

Mission Accomplished



Escaped defects < 5%



Urgent Defects
Aging < 7 days



Availability time > 99.98%

Questions



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