

Agile + DevOps **EAST**

A TECHWELL EVENT

AW11

Agile Leadership

Wednesday, November 7th, 2018 2:45 PM

You Can't Improve What You Can't See

Presented by:

Brandon Carlson

Lean TECHniques

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Brandon Carlson

A self-proclaimed nerd, Brandon Carlson works for Lean TECHniques Inc., an IT consultancy that helps teams deliver high-value, high-quality products to market. Since starting his career in 1995, Brandon has been blessed with experiences to remind him how much more there is to learn. Passionate about elevating the performance of the IT industry, he has helped numerous organizations, from startups to Fortune 100 companies, improve their product development and delivery systems. Brandon's current interests include behavioral psychology and professionalism in the world of software development. He can be reached on Twitter and pretty much everywhere else on the web as [@bcarlso](#).

YOU CAN'T FIX WHAT YOU CAN'T SEE



DevOps East
Orlando, FL
November 7, 2018

Brandon Carlson



Improvement Today?



Improvement Today?

Retrospectives

Improvement Today?

Retrospectives

Kaizen



Improvement Today?

Retrospectives

Kaizen

Post-mortem



Your Experiences?



A Thought Experiment...



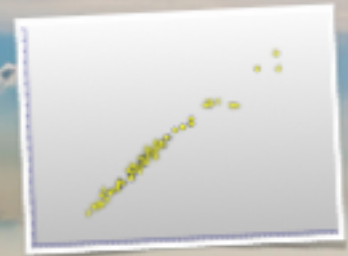
Big Data

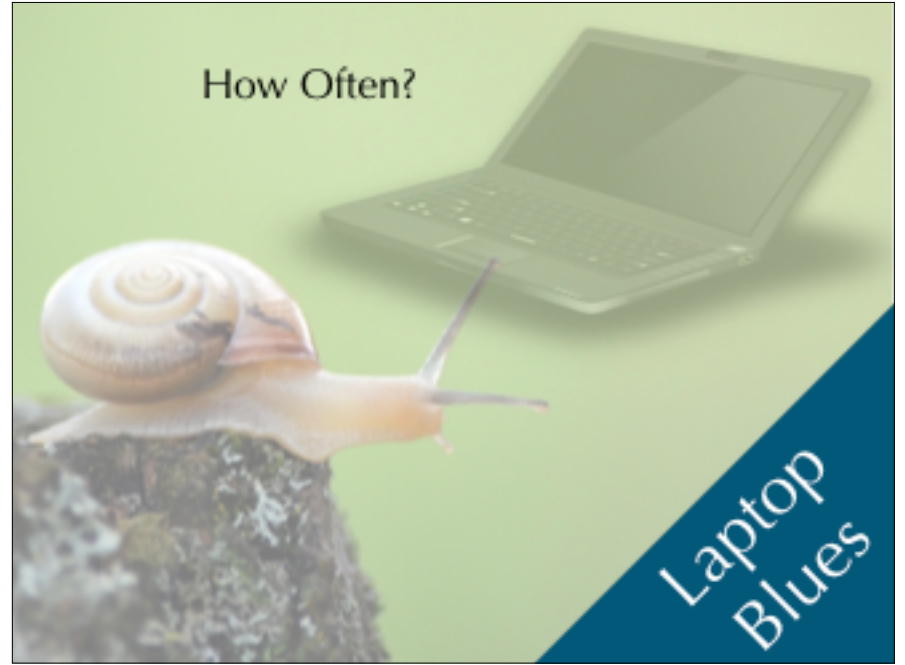


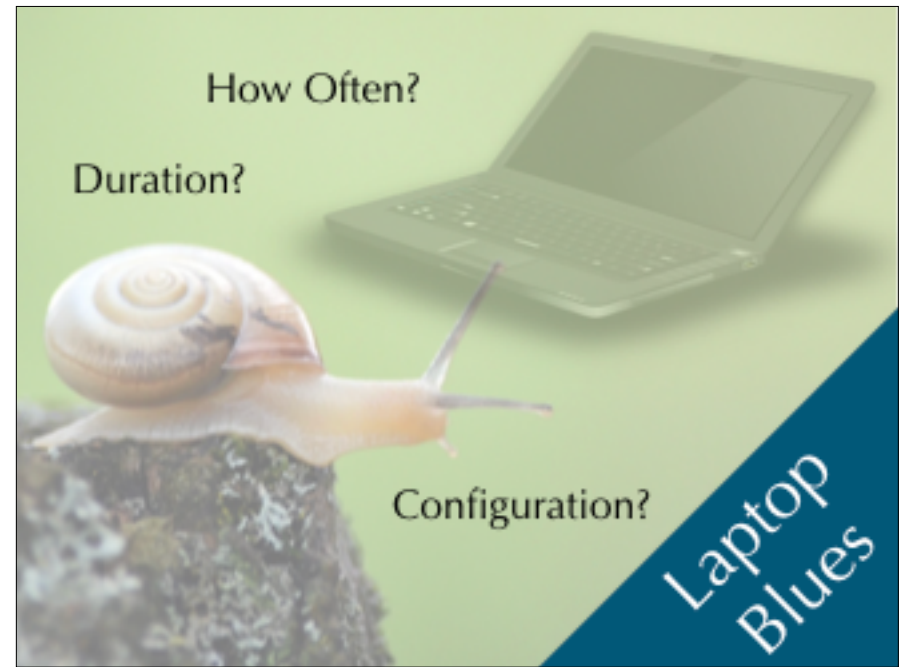
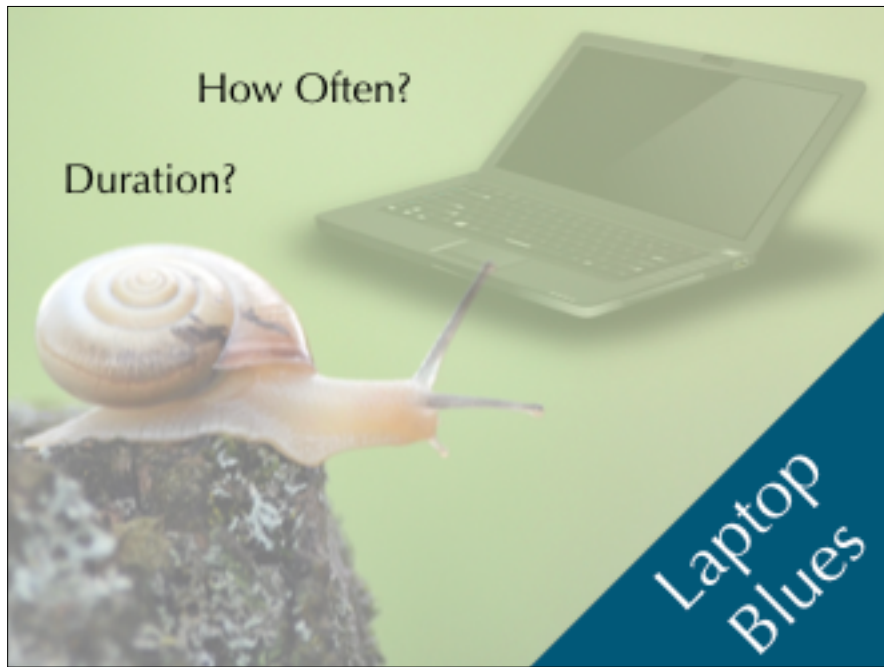
Data Exhaust



Data Exhaust











Results

```
~/code/coefficient (master) $ git status
# On branch master
# Changes to be committed:
#   (use "git reset HEAD <files>..." to unstage)
#
#       modified:   coefficient-core/pom.xml
#       new file:   coefficient-core/src/main/java/com/example/RowMapper.java
#       new file:   coefficient-core/src/main/java/com/example/ThreadManager.java
#
# Recommendations:
#   - Other developers who changed "coefficient-core/src/main/java/com/example/ThreadManager.java"
#     also changed "coefficient-core/src/main/resources/thread-manager.properties"
~/code/coefficient (master) $
```

Where are the bugs?

```
95     <img alt="carousel-indicator" data-bbox="678 312 925 345"/>
96     <div class="carousel-caption">
97       <h1>One more for good measure.</h1>
98       <p>Cras justo odio, dapibus ac facilisis in, egestas eget quam. In
99       <a class="btn btn-lg btn-primary" href="#" role="button">
100     </div>
101   </div>
102   <a class="left carousel-control" href="#myCarousel" role="button" data-bbox="645 450 925 485">
103     <span class="glyphicon glyphicon-chevron-left" aria-hidden="true">
104     <span class="sr-only">Previous</span>
105   </a>
106   <a class="right carousel-control" href="#myCarousel" role="button" data-bbox="645 530 925 565">
107     <span class="glyphicon glyphicon-chevron-right" aria-hidden="true">
108     <span class="sr-only">Next</span>
109   </a>
110 </div><!-- /.carousel -->
111 <!--Featured Content Section-->
112 <div class="container">
113   <div class="row">
114     <div class="col-md-4"></div>
115     <div class="col-md-4"> ch2</div>
116     <div class="col-md-4"></div>
```

Where are the bugs?

```
95 <div class="container">
96   <div class="carousel">
97     <div class="carousel-caption">
98       <h1>One more for good measure.</h1>
99       <p>Cras justo odio, dapibus ac facilisis in, egestas eget quam.
100     </p>
101     <p><a class="btn btn-lg btn-primary" href="#" role="button">
102       </p>
103     </div>
104   </div>
105   <div class="left carousel-control" href="#myCarousel" role="button" data-
106     <span class="glyphicon glyphicon-chevron-left" aria-hidden="true">
107     <span class="sr-only">Previous</span>
108   </div>
109   <div class="right carousel-control" href="#myCarousel" role="button" data-
110     <span class="glyphicon glyphicon-chevron-right" aria-hidden="true">
111     <span class="sr-only">Next</span>
112   </div>
113 </div>
114 </div>
115 <div class="row">
116   <div class="col-md-4">
117     <h2>FEATURED CONTENT</h2>
118   </div>
119 </div>
```



Where are the bugs?

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95 <div class="container">
96   <div class="carousel">
97     <div class="carousel-caption">
98       <h1>One more for good measure.</h1>
99       <p>Cras justo odio, dapibus ac facilisis in, egestas eget quam.
100     </p>
101     <p><a class="btn btn-lg btn-primary" href="#" role="button">
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103     </div>
104   </div>
105   <div class="left carousel-control" href="#myCarousel" role="button" data-
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108   </div>
109   <div class="right carousel-control" href="#myCarousel" role="button" data-
110     <span class="glyphicon glyphicon-chevron-right" aria-hidden="true">
111     <span class="sr-only">Next</span>
112   </div>
113 </div>
114 </div>
115 <div class="row">
116   <div class="col-md-4">
117     <h2>FEATURED CONTENT</h2>
118   </div>
119 </div>
```



Comments?

Where are the bugs?

```
95 <div class="container">
96   <div class="carousel">
97     <div class="carousel-caption">
98       <h1>One more for good measure.</h1>
99       <p>Cras justo odio, dapibus ac facilisis in, egestas eget quam.
100     </p>
101     <p><a class="btn btn-lg btn-primary" href="#" role="button">
102       Ticket Tracking?
103     </a>
104   </div>
105   <a class="left carousel-control" href="#myCarousel" role="button" data-
106     <span class="glyphicon glyphicon-chevron-left" aria-hidden="true">
107     <span class="sr-only">Previous</span>
108   </a>
109   <a class="right carousel-control" href="#myCarousel" role="button" data-
110     <span class="glyphicon glyphicon-chevron-right" aria-hidden="true">
111     <span class="sr-only">Next</span>
112   </a>
113   <div class="carousel-inner">
114     <div class="item active">
115       <img alt="..." data-...>
116     </div>
117     <div class="item">
118       <img alt="..." data-...>
119     </div>
120     <div class="item">
121       <img alt="..." data-...>
122     </div>
123   </div>
124   <div class="text-center">
125     <h2>FEATURED CONTENT</h2>
126     <div class="col-md-4">
127     <div class="col-md-4">
128     <div class="col-md-4">
129   </div>
130 </div>
```



Where are the bugs?

```
95 <div class="container">
96   <div class="carousel">
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126     <div class="col-md-4">
127     <div class="col-md-4">
128     <div class="col-md-4">
129   </div>
130 </div>
```



Code History?

Results





Estimates vs Actuals?

Committed vs Completed?

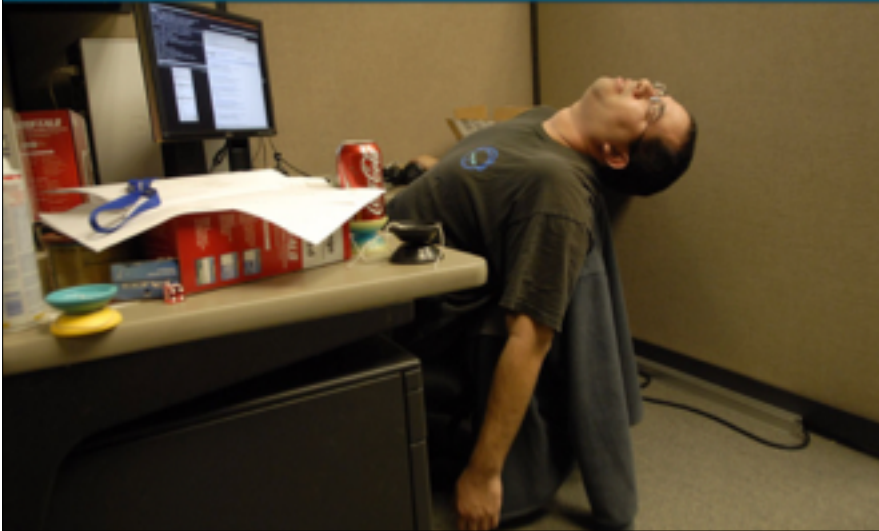
Missing Commitments?



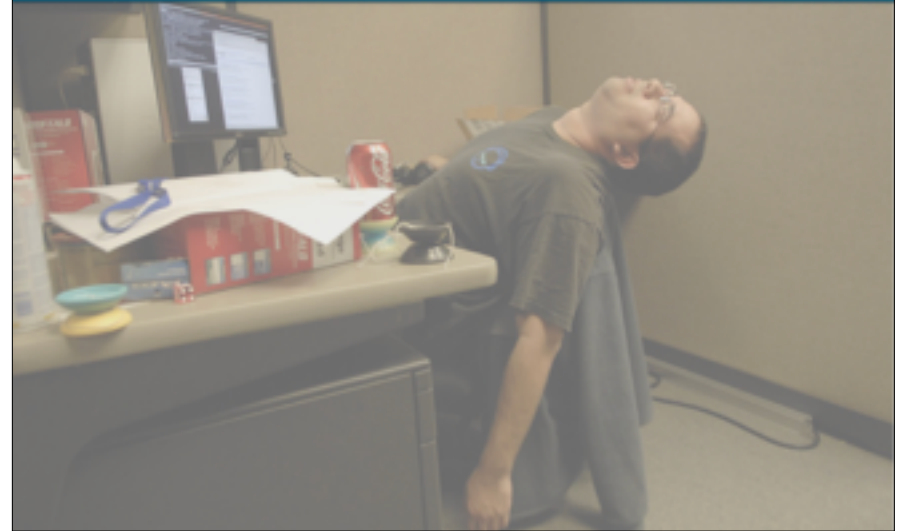
MON 25	TUE 26	WED 27	THU 28	FRI 29
				
AIR RAIN 65° • 79°	PM SHOWERS 60° • 78°	MOSTLY CLOUDY 67° • 79°	PARTLY CLOUDY 64° • 82°	SCATTERED THUNDERSTORMS 58° • 80°
<small>PRECIP: 40% WIND: WNW AT 10MPH</small>	<small>PRECIP: 30% WIND: NW AT 10MPH</small>	<small>PRECIP: 10% WIND: SWW AT 10MPH</small>	<small>PRECIP: 5% WIND: SWW AT 10MPH</small>	<small>PRECIP: 5% WIND: SWW AT 10MPH</small>

Results

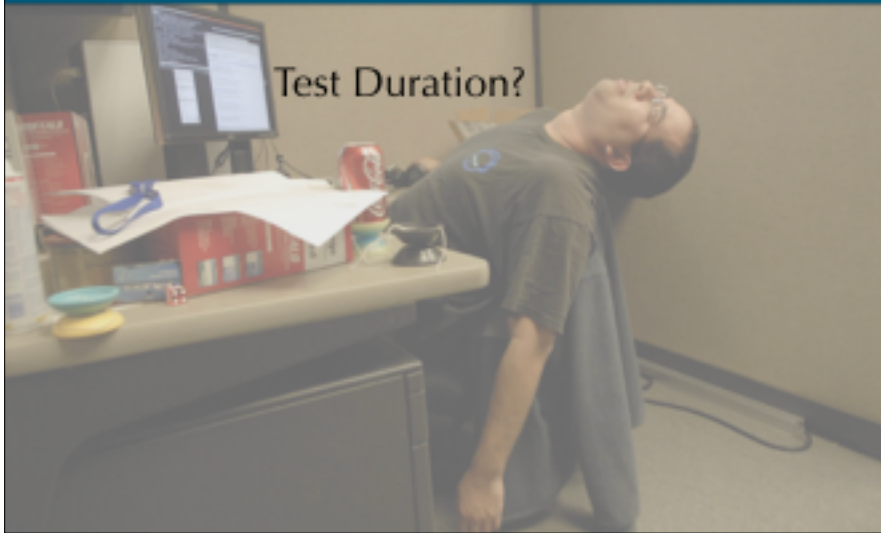
Long Test Runs?



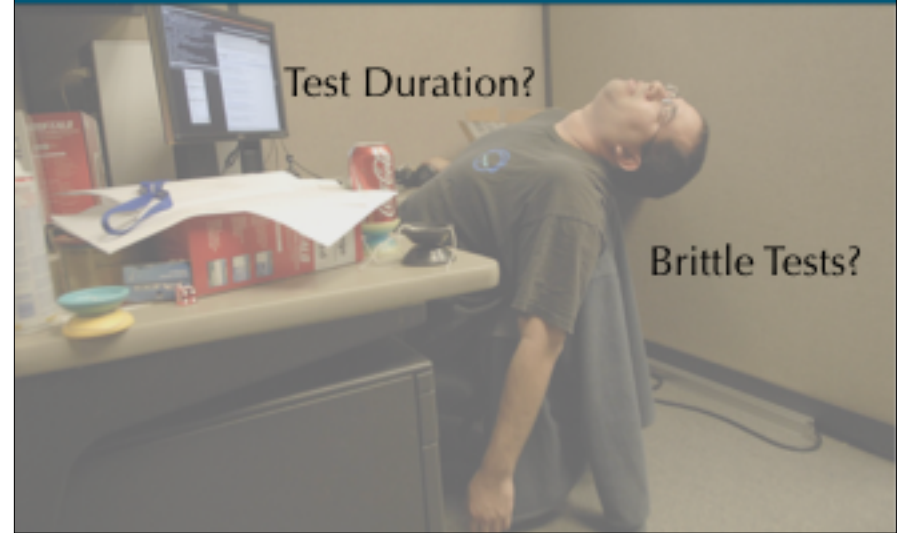
Long Test Runs?



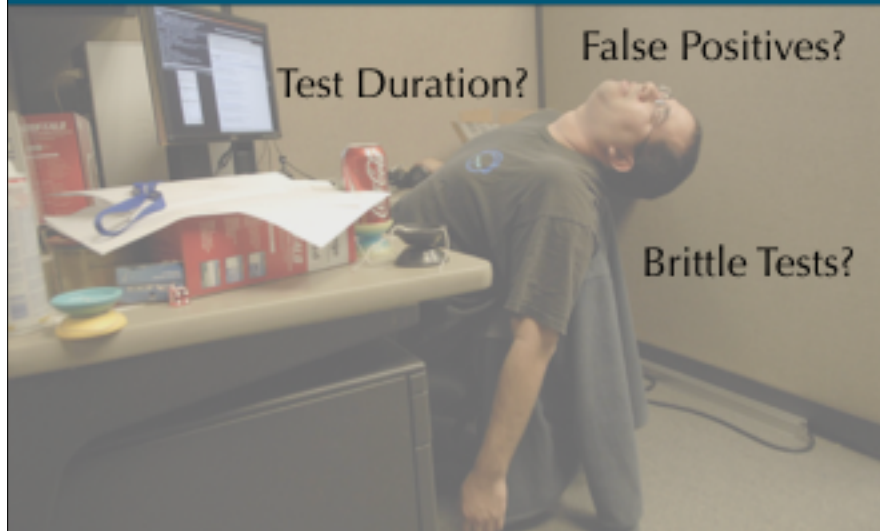
Long Test Runs?



Long Test Runs?



Long Test Runs?



Results

- LearnerReceivesCertificate [Brittle, Slow]
- InstructorLaunchILT [Brittle]
- AdministratorLearningPlanProgressReport [Slow]
- AdministratorSearchForCannedContent [Brittle]
- LearnerTextSearch [Slow]
- AdministratorAutoAssignmentOfGroups [Slow]
- AdministratorAutoAssignmentOfCourses [Slow]
- AdministratorAddUser



Can We Increase Velocity?



Can We Increase Velocity?

Personal Capacity?



Can We Increase Velocity?

Personal Capacity?



Interruptions?

Can We Increase Velocity?

Personal Capacity?



Meetings?

Interruptions?

Can We Increase Velocity?



Results

Regression Testing?

QUALITY CONTROL

Regression Testing?

QUALITY CONTROL

Regression Testing?

Defect
Density?

QUALITY CONTROL

Regression Testing?

Defect
Density?

QUALITY CONTROL

History?

Results

QU

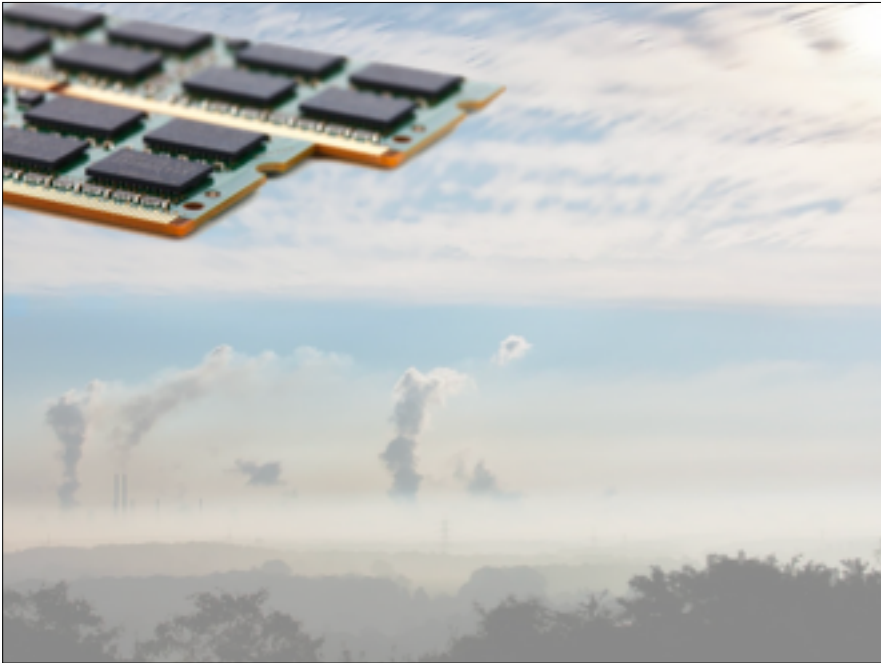
US4260

US2965

TROL

US2964





CommitLogFileParser.java
 CommitProcessor.java
GitCommitLogFileParser.java
 InternalFileExtractor.java
 OrientDbBundle.java
 OrientDbConfiguration.java
 OrientDbManager.java
 RelatedStoriesResource.java
 RelatedStoryBuilder.java
 Story.java
 StoryDetail.java
 StoryOptics.java
 StoryStory.java

```

--code/efficient (master) $ git status
# On branch master
# Changes to be committed:
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#       modified:   coefficient-core/pom.xml
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# Recommendations:
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```

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---	---	--	--	--

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```

CommitLogFileParser.java
 CommitProcessor.java
GitCommitLogFileParser.java
 InternalFileExtractor.java
 LoadCommitsResource.java
 OrientDbBundle.java
 OrientDbConfiguration.java
 java
 java
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- AdministratorSearchForCannedContent [Brittle]
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~code/cefficient (master) \$

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~code/cefficient (master) \$

Learn To Spot & Leverage Data Exhaust

Questions?

Want something useful to take back to the office?

Presentations these days are full of pictures and not any words. That's great for when you're at the conference taking in the information in person, but they just don't translate when you come back and explain it to your team.

That's why we've created a shareable version of this presentation. It contains all of the content from the live presentation, but in a more digestible format for taking offline and reviewing and sharing with your colleagues. All you've got to do is go to e-mail us at ds@picost.211010.com. Once we've received your e-mail, you'll receive the shareable version and any updates we make to the presentation moving forward.

Thanks for attending and let us know how you've leveraged data exhaust to improve your overall software delivery performance.

Thanks!
Brandon



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Product Development



Coaching

Staffing



Contact Us