How to Lose a Friend in 3 Days

Using Splunk to crown the king of the hill

Brett Roberts | @broberts2261
Cory Minton | @cory_minton

October 2018

Forward-Looking Statements

During the course of this presentation, we may make forward-looking statements regarding future events or the expected performance of the company. We caution you that such statements reflect our current expectations and estimates based on factors currently known to us and that actual events or results could differ materially. For important factors that may cause actual results to differ from those contained in our forward-looking statements, please review our filings with the SEC.

The forward-looking statements made in this presentation are being made as of the time and date of its live presentation. If reviewed after its live presentation, this presentation may not contain current or accurate information. We do not assume any obligation to update any forward-looking statements we may make. In addition, any information about our roadmap outlines our general product direction and is subject to change at any time without notice. It is for informational purposes only and shall not be incorporated into any contract or other commitment. Splunk undertakes no obligation either to develop the features or functionality described or to include any such feature or functionality in a future release.

splunk> .conf18

Who Will be the King of the Hill?

splunk> .conf18

The Competitors

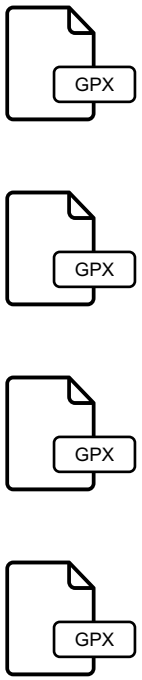
Brett “Black Diamond” Roberts

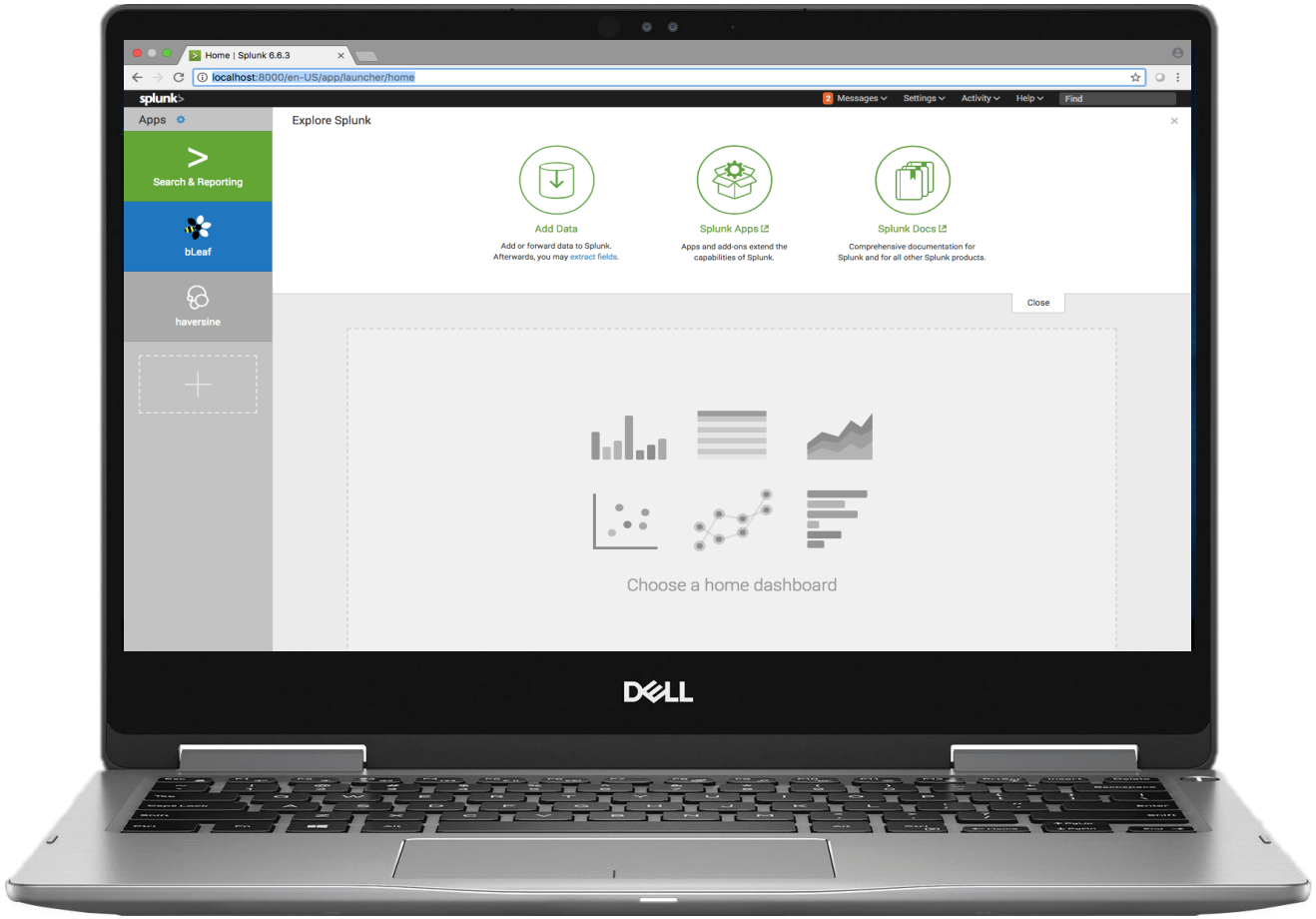
Favorite SPL Command = Eval

Cory “Bunny Slope” Minton

Favorite SPL Command = “What is SPL?”

Technologies that We Used



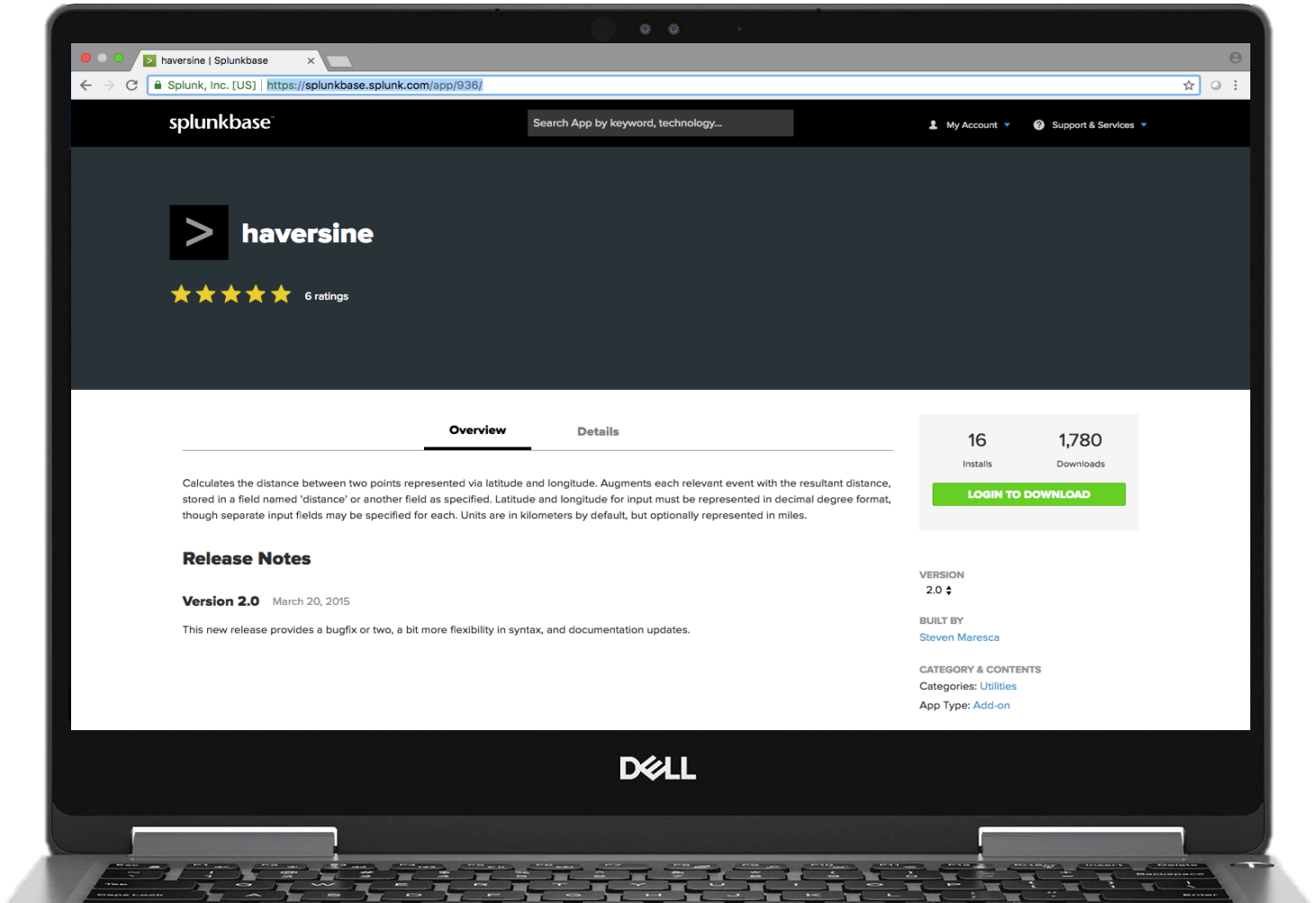


Snoww Mobile App

Splunk Enterprise 6.6.3

splunk> .conf18

haversine



- Free app in SplunkBase
  - Calculates the distance between two points represented via latitude and longitude
    - Built by Steven Maresca

Using the Haversine App…

3/20/18
3:32:26.000 PM

```
<time>2018-03-20T15:32:26</time>
<bounds maxlat="39.196370537429" maxlon="0" minlat="0" minlon="-120.27697560389"/>
</metadata>
<trk>
<name></name>
```

Show all 9 lines

host = Bretts-MacBook-Air.local | source = 65245_activity.gpx | sourcetype = Ski_Data_Brett

```
5 | haversine originField=first_loc second_loc
```

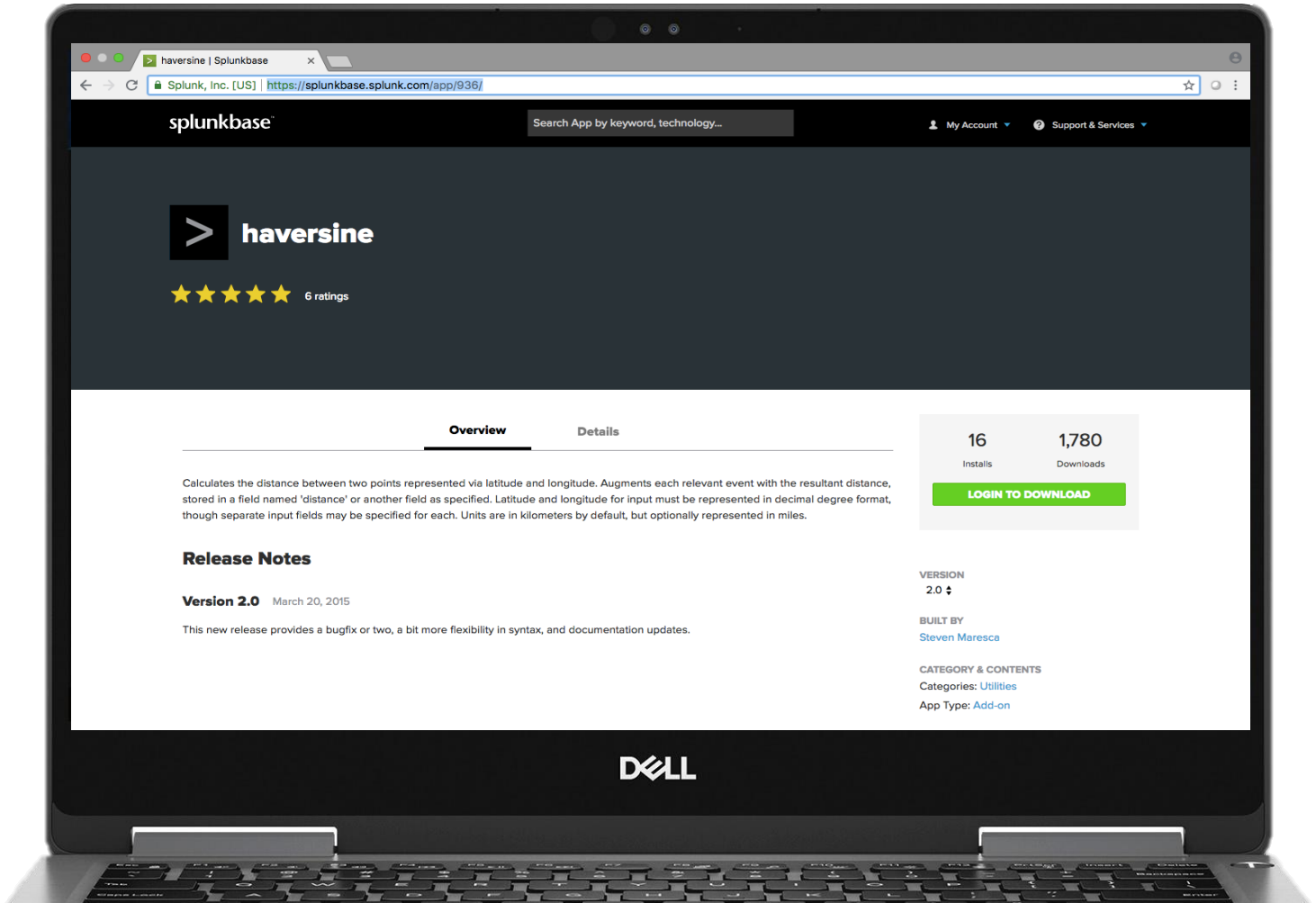
1/24/18
11:51:00.000 PM

```
<time>2018-01-24T23:51:00.000000</time>
</trkpt><trkpt lat="39.280684143341" lon="-120.12390537199">
<ele>1956.79</ele>
<time>2018-01-24T23:51:13.000000</time>
</trkpt><trkpt lat="39.280640222169" lon="-120.12395197537">
```

Show all 6 lines

distance = 0.0039270113 | host = Bretts-MacBook-Air.local | source = 66587_activity.gpx | sourcetype = Ski_Data_Brett

haversine



- Free app in SplunkBase
  - Calculates the distance between two points represented via latitude and longitude
    - Built by Steven Maresca

Now we have distance and time…

we can get SPEED

```
sourcetype="ski_data_brett" date_mday!=25
| eval latlon=lat.","lon
| transaction maxspan=7h maxevents=2 | eval first_loc=mvindex(latlon, 0)
| eval second_loc=mvindex(latlon, 1)
| haversine originField=first_loc second_loc
| eval distance = (distance * .62137119)
| where distance!=9.8250112
| stats sum(distance) as "Total Distance"
```

What Questions Did we Ask?

Total Runs

Daily Runs

Distance

Average Speed

Top Speed

The Results

Who will be the king of the hill

Total Runs

SPL Query

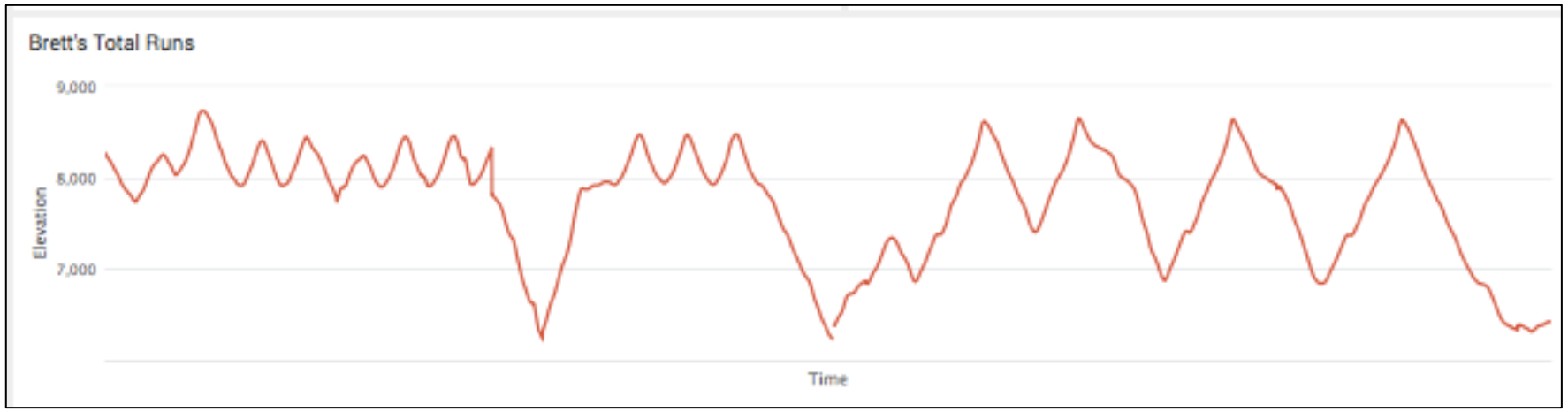
```
sourcetype="ski_data_brett" _time="1516751022.999000" OR  _time="1516750994.999000" OR _time="1516751710.997000" OR  _time="1516752307.999000" OR _time="1516753283.999000"
    OR _time="1516753958.001000" OR _time="1516754762.997000" OR _time="1516755338.999000" OR _time="1516767929.999000" OR  _time="1516768502.998000" OR _time="1516769099
    .997000" OR _time="1516838812.996000" OR _time="1516840050.000000" OR _time="1516841322.997000" OR _time="1516843320.999000" OR _time="1516852016.998000" OR  _time
    ="1516749607.011000"
| stats count as elevation
```

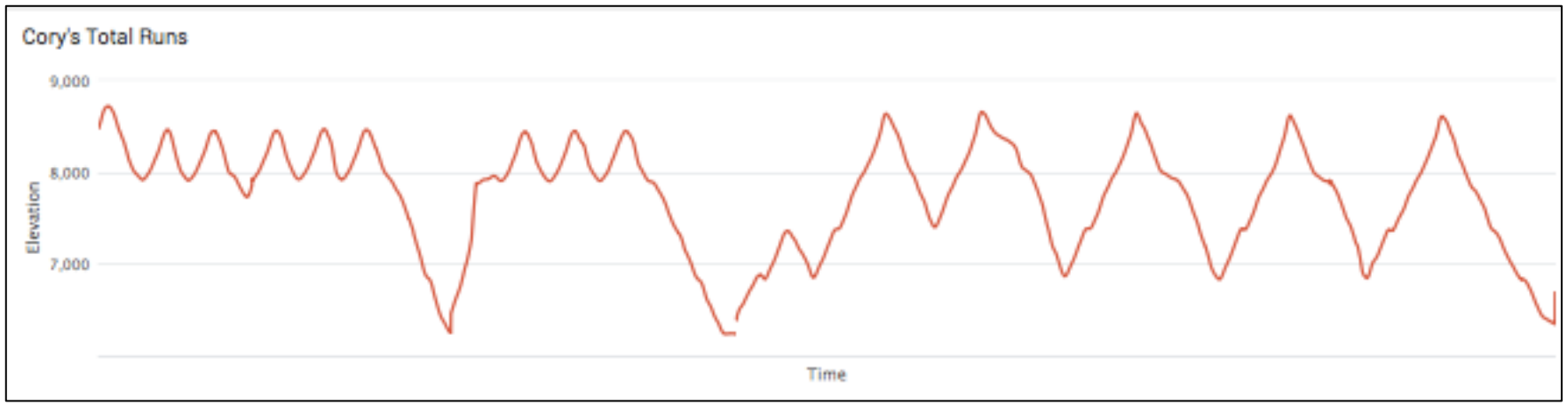
Results

Brett's Total Runs	Cory's Total Runs
17	16

splunk> .conf18

Plotting Our Runs



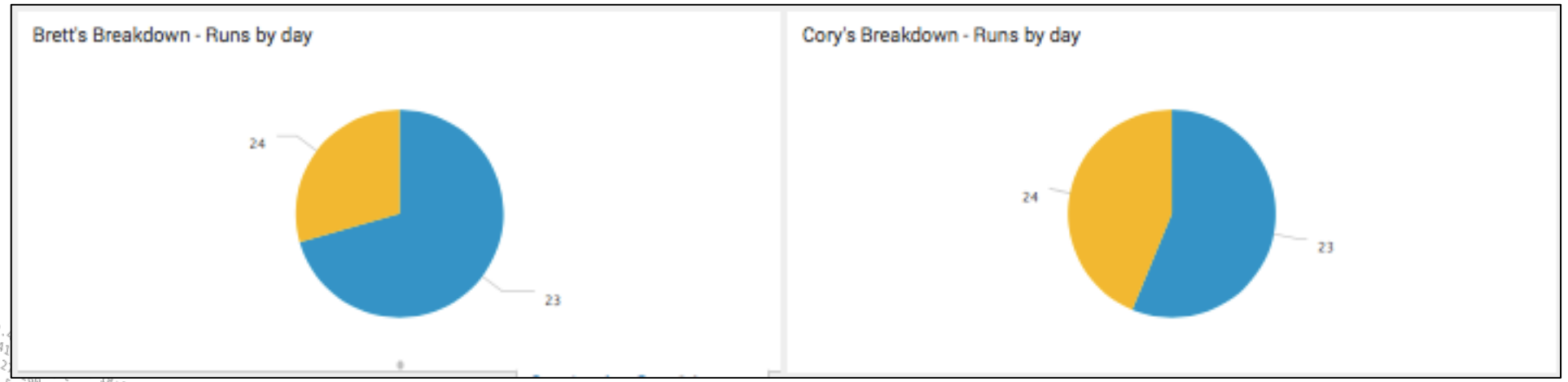


Of Runs by Day

SPL Query

```
1 sourcetype="ski_data_cory" _time="1516750895.998000" OR _time="1516751698.000000" OR _time="1516752215.000000" OR _time="1516753975.000000" OR _time="1516754749.998000" OR
    _time="1516755512.999000" OR _time="1516768030.000000" OR _time="1516768631.999000" OR _time="1516769198.998000" OR _time="1516837986.999000" OR _time="1516838769
    .998000" OR _time="1516840125.998000" OR _time="1516841325.999000" OR _time="1516843264.998000" OR _time="1516845188.000000" OR _time="1516851491.999000"
2 | stats count by date_mday
3 | rename date_mday as "date"
```

Results



splunk> .conf18

Total Distance

SPL Query

```
sourcetype="ski_data_cory"
| eval latlon=lat.",".lon
| transaction maxspan=7h maxevents=2 | eval first_loc=mvindex(latlon, 0)
| eval second_loc=mvindex(latlon, 1)
| haversine originField=first_loc second_loc
| eval distance = (distance * .62137119)
| where distance!=25.462668
| stats sum(distance) as "Total Distance"
```

Results

Brett's Total Distance	Cory's Total Distance
20.31 Miles	20.79 Miles

splunk> .conf18

Avg Distance Per Run

SPL Query

```
sourcetype="ski_data_brett" date_mday!=25
| eval latlon=lat.",".lon
| transaction maxspan=7h maxevents=2 | eval first_loc=mvindex(latlon, 0)
| eval second_loc=mvindex(latlon, 1)
| haversine originField=first_loc second_loc
| eval distance = (distance * .62137119)
| where distance!=9.8250112
| eval distance = (distance / 17)
| stats sum(distance) as "Total Distance"
```

Results

Brett's Avg Distance per Run	Cory's Avg Distance per Run
1.194 Miles	1.30 Miles

splunk> .conf18

Average Speed

SPL Query

```
sourcetype="ski_data_brett" date_hour!=0
|  eval latlon=lat.",".lon | transaction maxspan=7h maxevents=2
| eval first_loc=mvindex(latlon, 0)
| eval second_loc=mvindex(latlon, 1)
| where first_loc!=second_loc
| haversine originField=first_loc second_loc | eval speed=distance/(duration/60/60) | where speed != 14230.640620214393
| stats avg(speed) AS avgSpeed
| eval "avgSpeed"=round(avgSpeed,2)
| rename avgSpeed as "Average Speed"
```

Results

Brett's Trip Average Speed

Cory's Trip Average Speed

splunk> .conf18

Top Speed

SPL Query

```
index="ski_data_brett_northstar" sourcetype="ski_data_brett" | eval latlon=lat.",".lon  | transaction maxspan=1h maxevents=2  | eval first_loc=mvindex(latlon, 0)  | eval
    second_loc=mvindex(latlon, 1)  | where first_loc!=second_loc  | haversine originField=first_loc second_loc  | eval speed=distance/(7/30/60)  | eval speed=speed
    *.62137119223733 | stats max(speed) AS maxSpeed |eval "Max Speed"=round(maxSpeed,2) | fields "Max Speed"
```

Results

Brett's Top Speed

Cory's Top Speed

Time to Crown the ”King of the Hill”

Let’s Use Splunk…

- Go to this website →
- In field 2, under “Name or Team” put either:
  - “Brett” if you think he is king.
  - “Cory” if you think he is king.
- SHAKE YOUR PHONE!!!
- Highest shake velocity wins!

www.Splunk.com/shake

splunk> .conf18

Our Takeaways

- Splunk allows incredible exploration of data
- You can enrich data well in Splunk
- If we can do this goofy thing, imagine what you can do!
- Have fun!
- Keep learning
- Find your use case!

Don't Forget to Attend Our Other Sessions

1. Master The Dark Arts: Demystifying Splunk Architecture –
   - October 3rd from 2-2:45pm
2. Choosing the Right Infrastructure for Your Splunk Deployment
   - October 4th from 11:00-11:45am
3. Splunk for IT Ops: A Storage Perspective
   - October 4th from 11:00-11:45am
   - Splunk Theater

Stop by the Dell EMC booth (P1) to learn more

splunk> .conf18

Thank You

Don't forget to rate this session in the .conf18 mobile app