

Choosing the right infrastructure for your Splunk deployment

Brett Roberts | @broberts2261





Who is Brett Roberts?

- From Boston, MA...Go Pats
- 5 years at Dell EMC
- Data Analytics Solutions Specialist
- Splunk SE 1 Certified
- MBA Univ. of Maryland
- @broberts2261
- www.BigDataBeard.com



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splunk>

Key Takeaways

- 1. Splunk is a business critical application
- 2. Understanding infrastructure considerations
- 3. Choosing right infrastructure for YOUR Splunk deployment is critical

You have a basic understanding of...

What Splunk is

How Splunk works

Infrastructure components



Splunk has become a business critical application









Splunk is only as strong as its weakest link

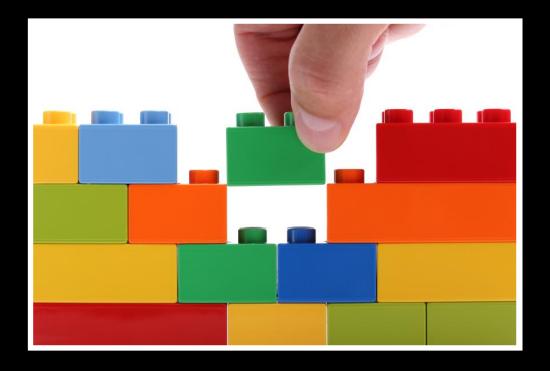
Having optimal infrastructure is a critical component for Splunk





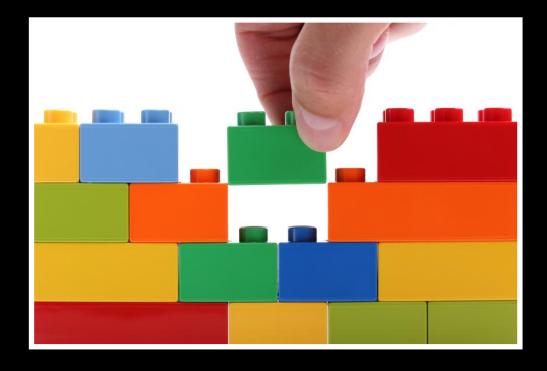
TOUGH DECISIONS AHEAD

Examine different decision points and explore considerations



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16.60 - 18:10.57:153] "GET / Category.screen?category_id=GIFTS&JSESSIONID=SDISLAFF19ADF19 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemid=EST-G&product_id=EST-G&prod







Build

18:10:57:15:3] "GET /category.screen?category_id=GIFTS&JSESSIONID=SDISLAFF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemid=EST-6&product_id=FL-DSH-01&JSESSIONID=SDISLAFF10ADFF10 HTTP 1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=views=e&itemid=EST-26&ps_FT3_id=FL-SW-100AUCt_id=FL-DSH-01&JSESSIONID=SDISLAFF10ADFF10 HTTP 1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=views=e&itemid=EST-26&ps_FT3_id=FL-SW-100AUCt_id=FL-DSH-01&JSESSIONID=SDISLAFF10ADFF10 HTTP 1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=views=e&itemid=EST-26&ps_FT3_id=FL-SW-10ADFF10 HTTP 1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=views=e&itemid=EST-26&ps_FT3_id=FT3

Buy





Talent

Time to Insight (Value)

Use Case

FT /product.screen?category_id=GIFTs&JSESSIONID=SDISL4FF10ADFF10 HTTP 1.1" 404 3312 HTTP 7.1" 404 3312 HTTP 7.1" 404 3312 HTTP 7.1" 404 3312 HTTP 7.1" 405 4312 HTTP

Cost vs.
Complexity





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"GET /category.screen?category_id=GIFTS&JSESSIONID=SDJSL4FF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/category.screen?category.



On-Prem

Off-Prem







Strategy

Data Growth

Economics

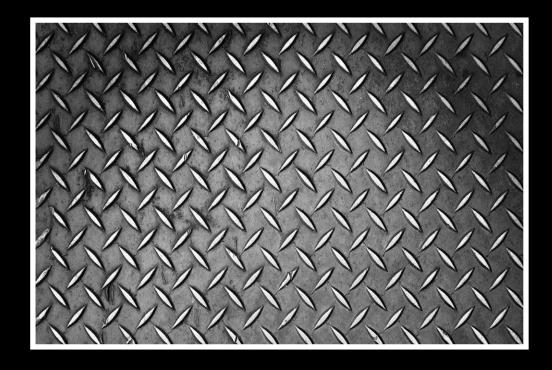
Regulatory / Compliance

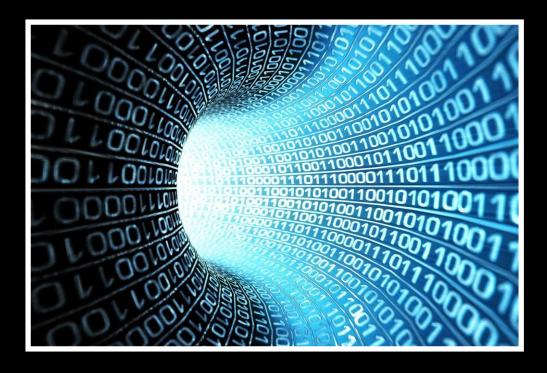
Management

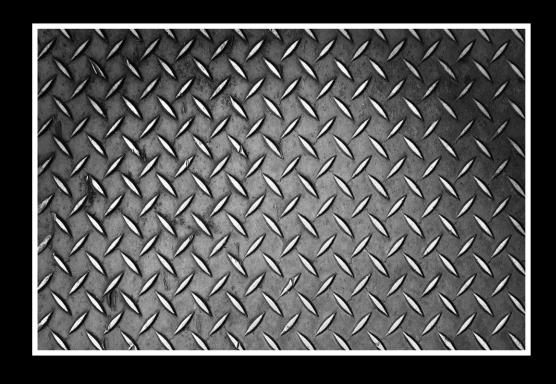




50.0 [07]10:57:153] "GET /category.screen?category_id=GIFTS&ISESSIONID=SDISLAFF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemid=EST-56&product_id=GIFTS.dd=Fin-StiDuct_id=GIFTS.dd=Fin-Sti



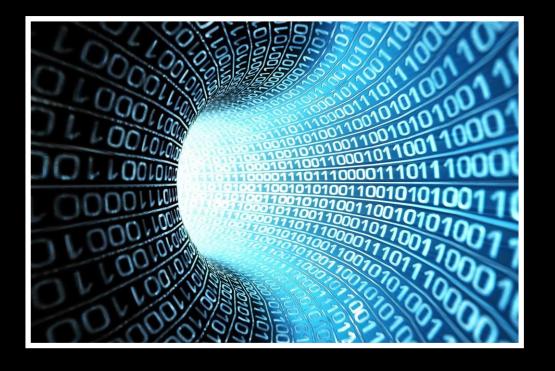


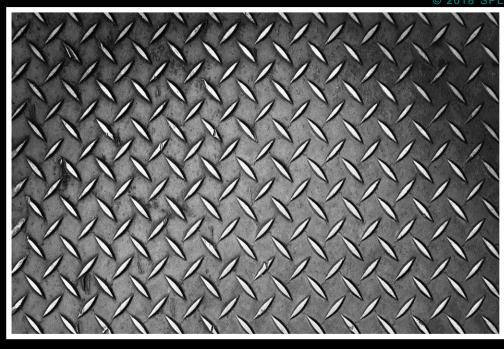


Virtual

Physical







Strategy

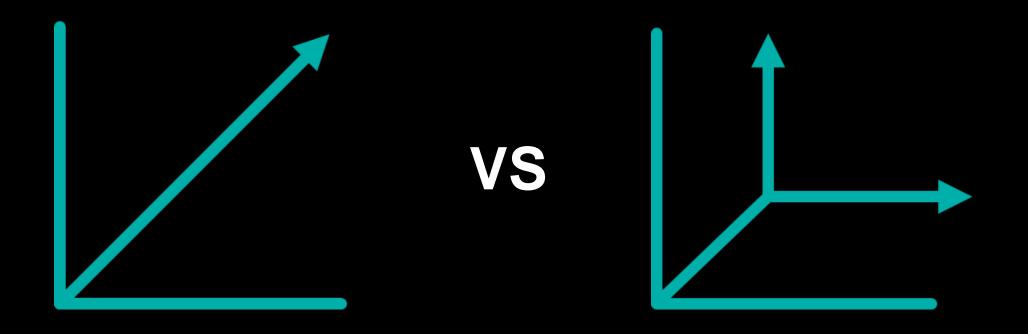
Dynamic or Fixed

Resource Allocation

Space

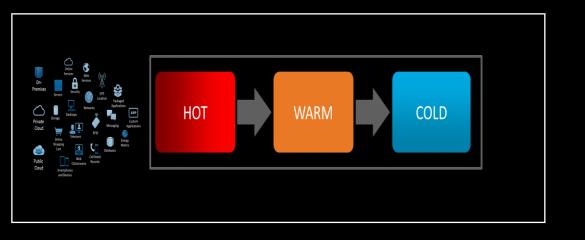
Hybrid Approach





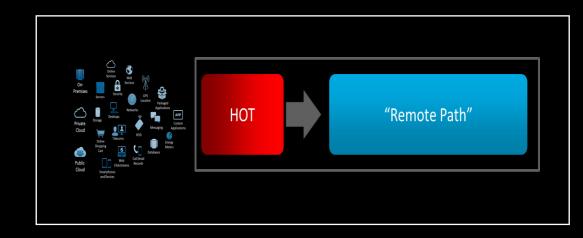
Scaling Considerations

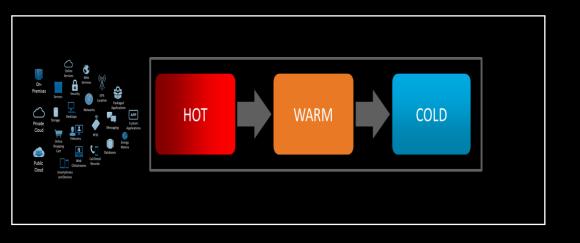


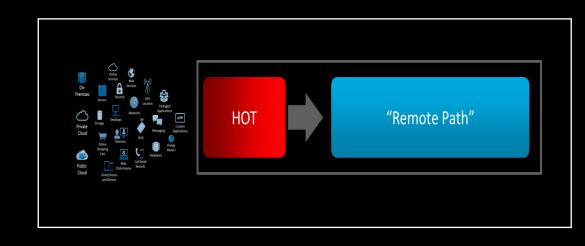




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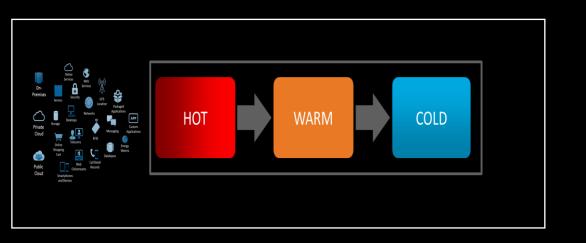


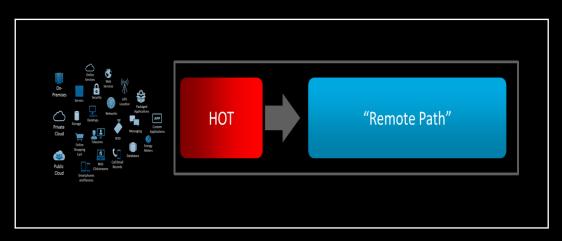


Traditional

SmartStore







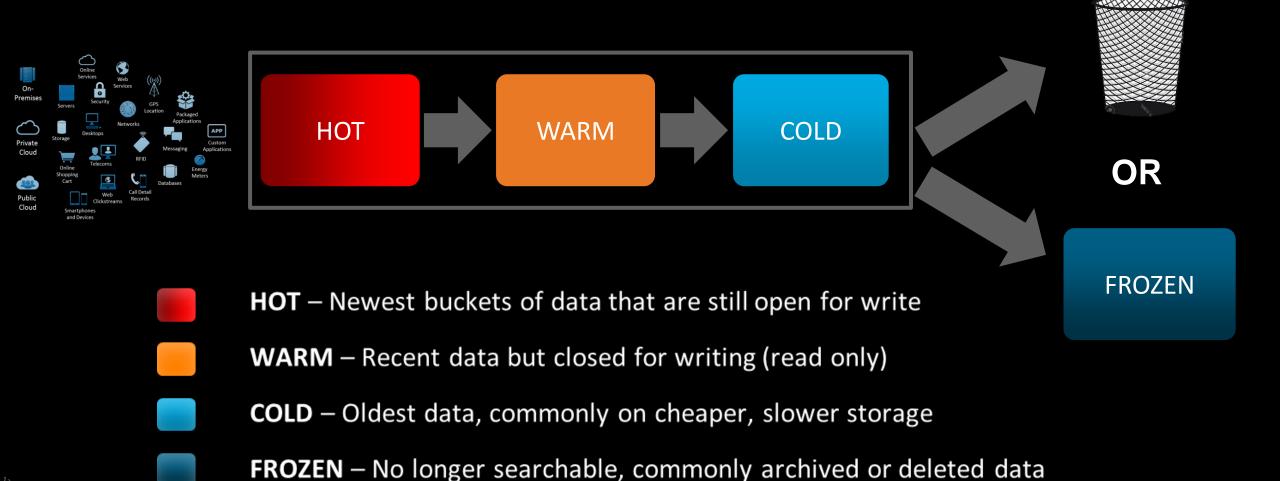
Capacity

Search Requirements

Performance



Tiering with Splunk



Tiering Recommendations

HOT

WARM

Direct Attached or SAN

Flash

>1000 IOPS

COLD

Option to use Hot/Warm infrastructure or add NAS HDD 800 IOPS

FROZEN

NAS or Object Storage
Data no longer able to be searched



Choosing the right configurations for indexers

Need to look to future when determining which configuration is right for you

Reference Host

CPU = 12 cores

RAM = 12GB

Mid Range

CPU = 24 cores

RAM = 64GB

High Performance

CPU = 48 cores

RAM = 128GB

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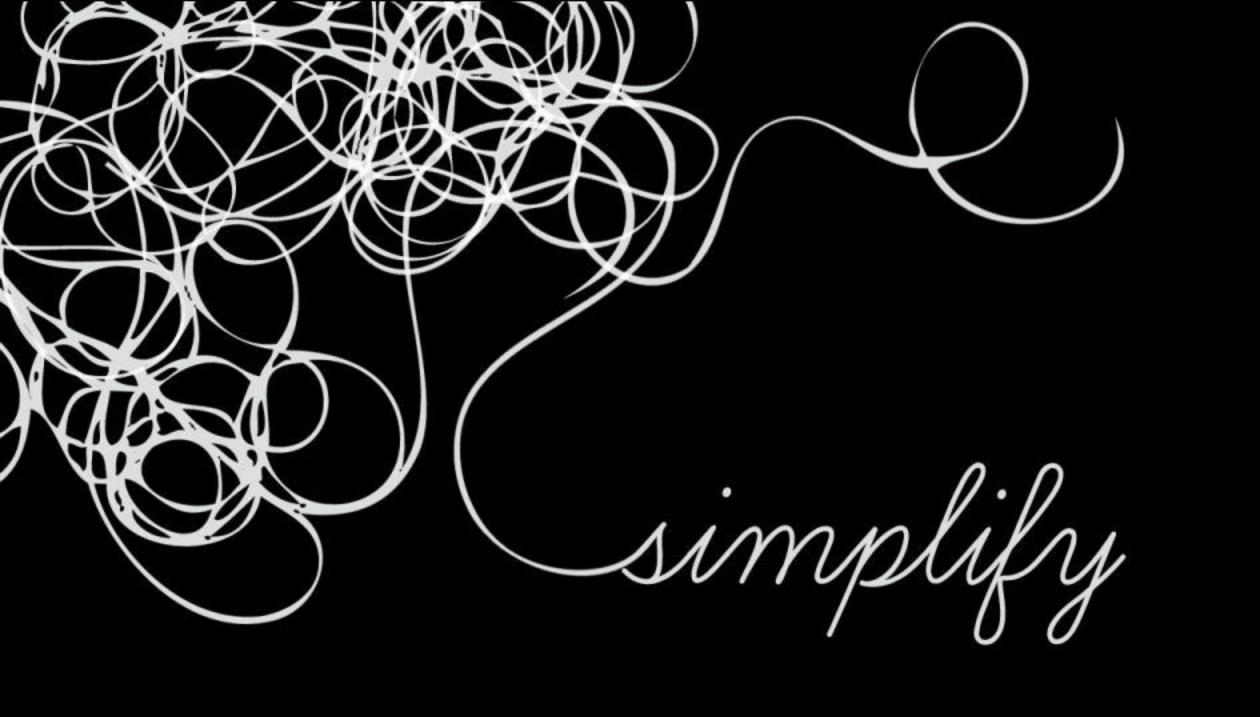
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Ingestion Apps Growth

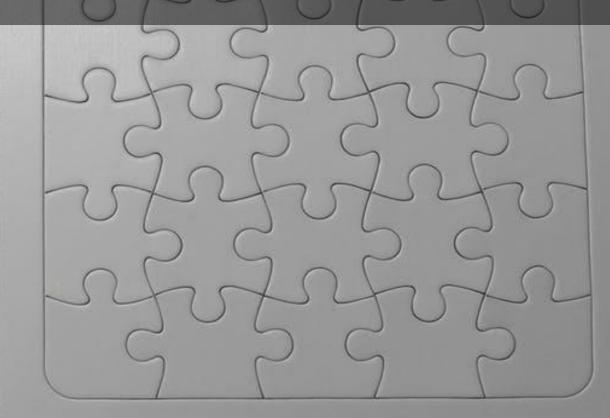




Ready Solutions for Splunk

Putting the pieces together for you

- Validated configurations
- Quicker time to value
- Reduce deployment risks



Dell EMC Ready Solutions for Splunk

Ready System for Splunk

VxRack Flex 1000





ScaleIO SDS SSD/HHD/Hybrid Bare Metal or Virtual VxRail

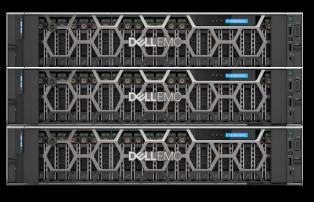




VMware VSAN SSD/HHD/Hybrid Virtual

Ready Bundle for Splunk

PowerEdge





DAS SSD/HHD/Hybrid **Bare Metal or Virtual**

Splunk applications from Dell EMC

Extend the power of Splunk to Dell EMC Platforms

What are Splunk Apps?

Splunk applications and add-ons allow user to import data into Splunk from specific sources

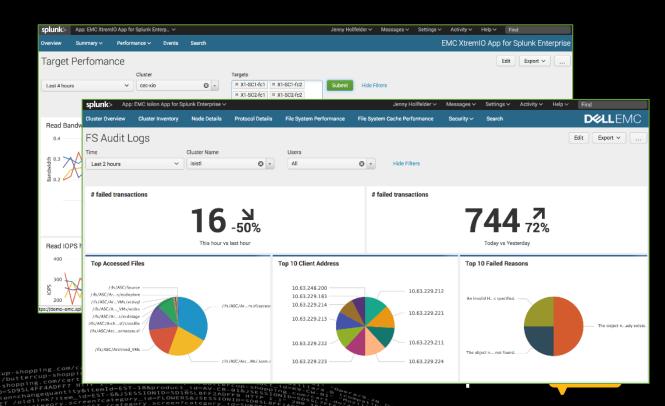
Splunk & its partners have created a rich community called SplunkBase that has 1000s+ applications

Why are Splunk Apps important?

Splunk apps and add-ons allow customers to incorporate new use cases and extend their Splunk environment. This leads to increased Splunk License needs as well as additional Hardware

Dell EMC has apps for the following:

- VMAX
- XtremIO
- Isilon
- VNX



Let our Splunk Ninjas help you!



Trained by Splunk

Splunk Architecture Experts

Dell EMC Portfolio Experts

Religious about Best Practices

Available across the GLOBE!!!

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If you are a Dell EMC customer, download the Dell EMC Apps

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Splunk for IT Ops: A Storage Perspective - 1:30 – 1:50pm
Today @ Theater

Questions?

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