The Great SIEM Migration

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The Great SIEM Migration

How to start from nowhere

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NATHAN ADAMS

Security Engineer

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Ice Breaker

My life in a slide ;)

- PNC Bank in Pittsburgh, PA
- Using Splunk for 2+ years
- Bicycling
- Hiking
- Volleyball
- Golfing

Penny

The Starting Line

Every team needs to start somewhere

2
SIEMs

10,000+
Endpoints

60+
Standard Operating Procedures

90+
Security Rules and Reports

4 Billion
Daily Events

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Challenges

What are we trying to solve for?

- Volume of security events
- Manual alert processing
- Multiple security tools
- Hundreds of daily abuse emails
- Manual threat intelligence processing
- Multiple SIEM applications

Key Objectives

Things to remember

Log Sources

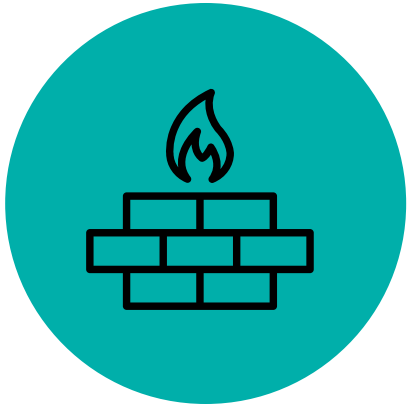
Data Volume

Architecture

Log Sources

What are the crown jewels?

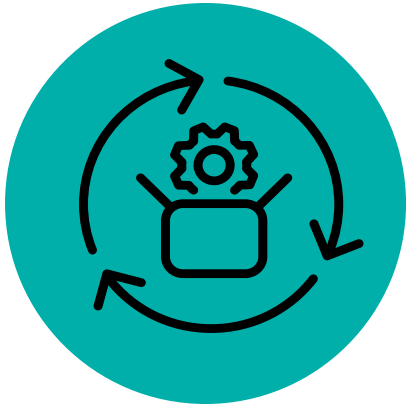
VPN



Network

Endpoint

IDS or IPS



Application Servers

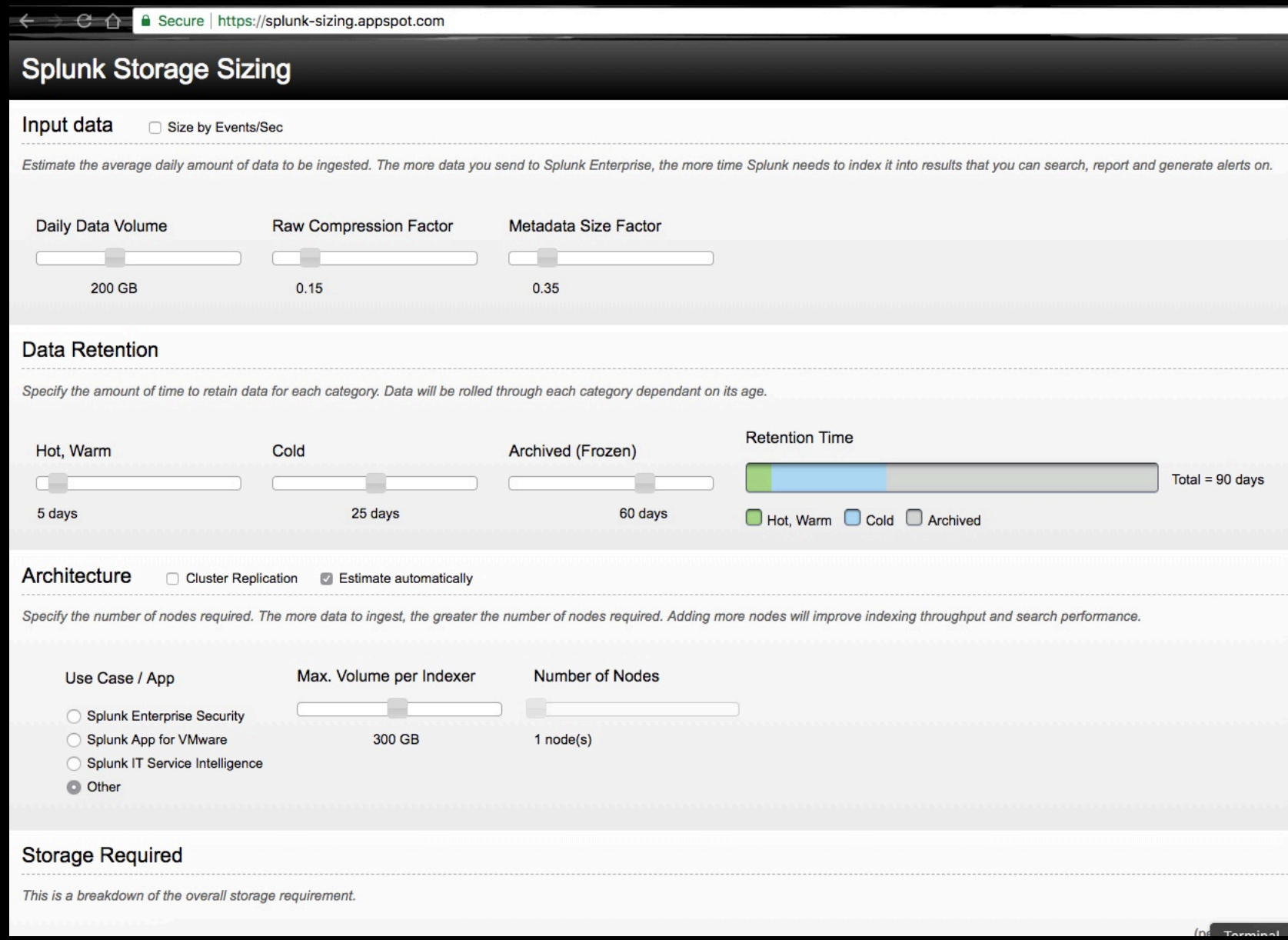
Data Volume

What? How much? Where? How long?

- What are my data sources?
- How much data will each source generate per day?
- Where is that data being sent?
- How long must the data be stored?

Splunk Storage Sizing Tool

https://splunk-sizing.appspot.com



Storage and Retention

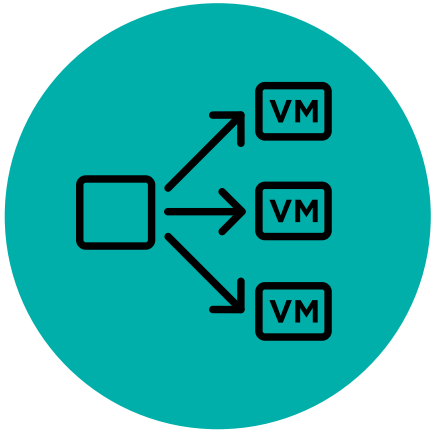
How much does speed matter?

> "Splunk will be as slow as it's slowest device."
>
> – ***Anonymous Splunk Sales Engineer***

- Disk Input/Output (I/O)
  - 800 I/O Minimum
- Key Points:
  - More disks. Better index performance
  - Knowing total throughput is important
  - Understand network latency
    - High latency, slower searches

Splunk Architecture

Bare Metal



Dedicated VMs

Shared VMs

Splunk Architecture

What will be the Splunk foundation?

- **Bare Metal**
  - Best overall performance
  - Latency control
  - Security
  - Alleviates “noisy neighbor” problem

One house. One resident.

- **Dedicated Virtual**
  - Splunk best practices
  - Performance varies with configuration
  - Scalability

A gated community with only one resident

- **Shared Virtual**
  - Lowest performance
  - Shared resources leading to “noisy neighbor”

Sharing a gated community

The Finish Line

Progress is progress

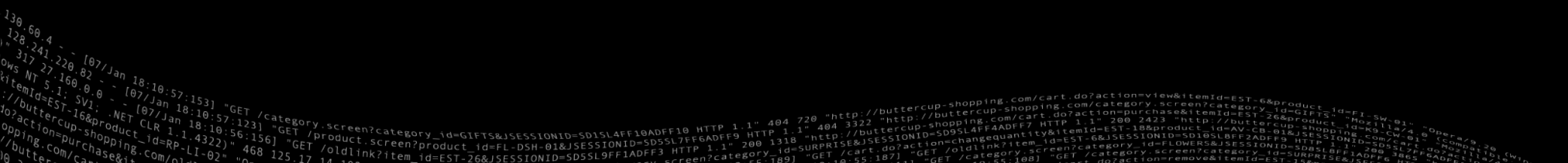
1
SIEM

10,000+
Endpoints

40
Standard Operating Procedures

20
Security Rules and Reports

4 Billion
Daily Events



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Key Takeaways

If you don't remember anything else, remember this.

1. What are the critical log sources?
2. How much data will Splunk consume per day?
3. What infrastructure is best for your deployment?

Q&A

Nathan Adams | Presenter

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Thank You

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