Threat Hunting and Anomaly Detection with Splunk UBA

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October 2018

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Who is This guy?

Tom Smit

smitty@splunk.com
Staff Sales Engineer

- Working at Splunk for almost 4 years
- Security and UBA SME
- Previous life at Core Security, Mimecast, and Symantec

Threat Hunting and Anomaly Detection

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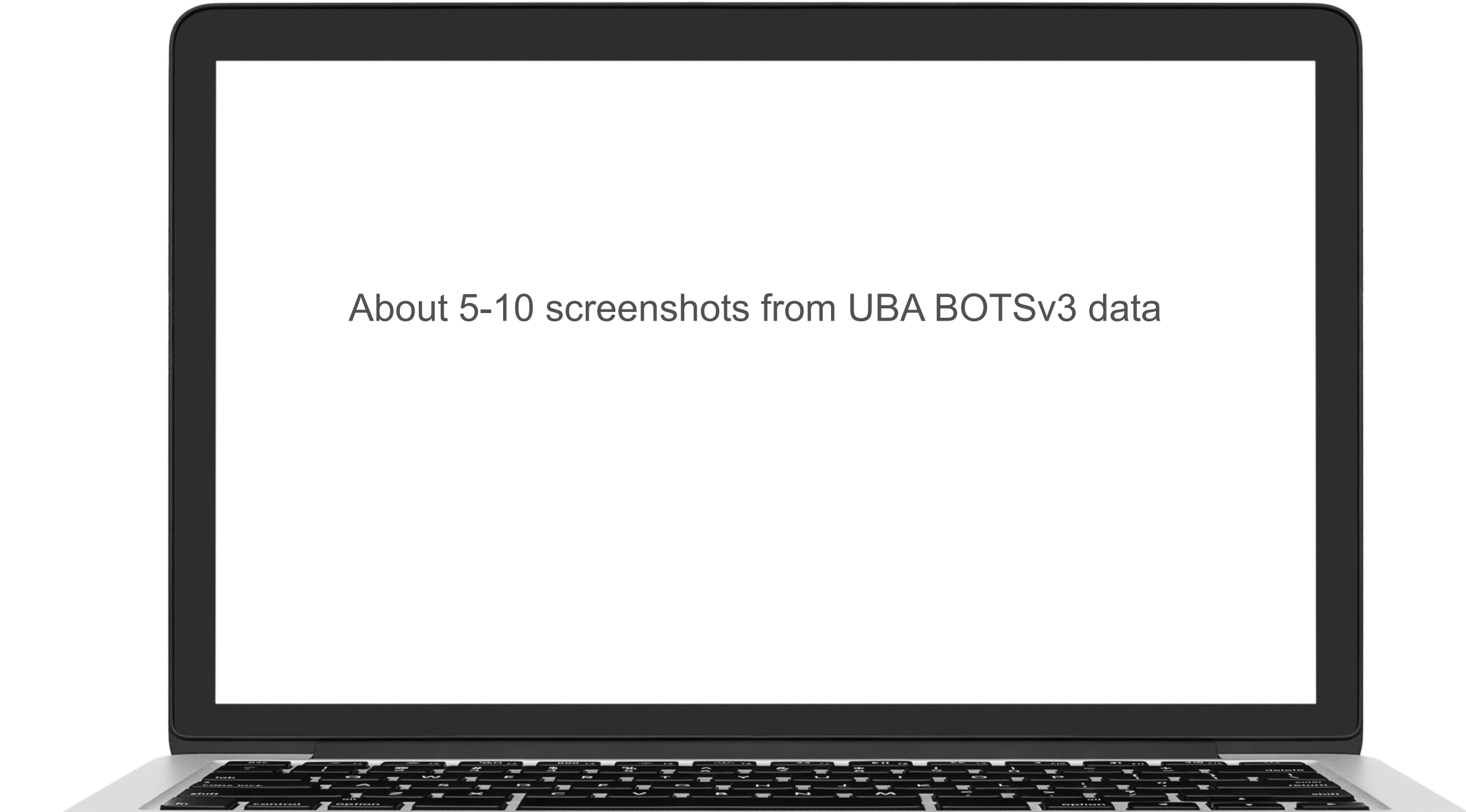
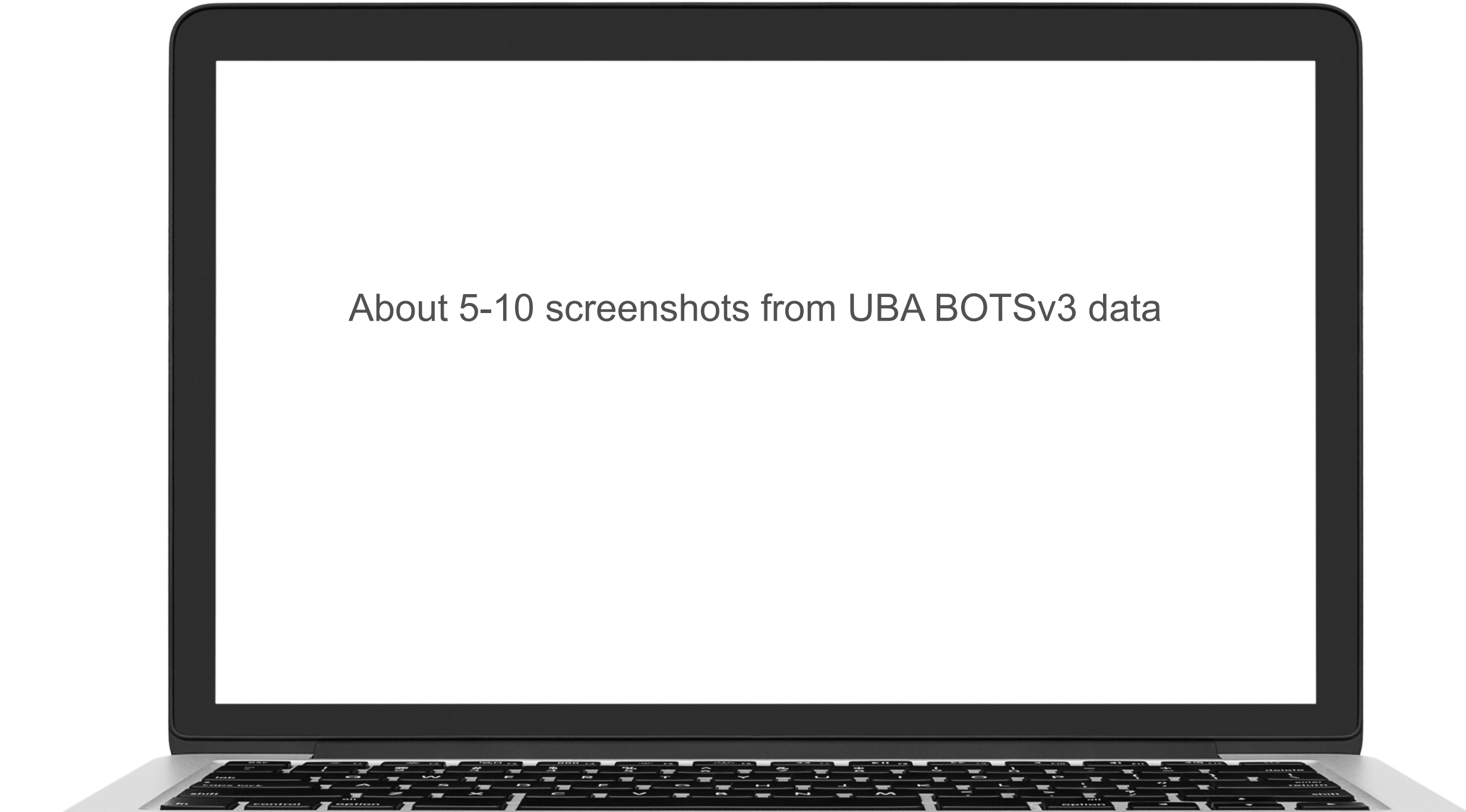
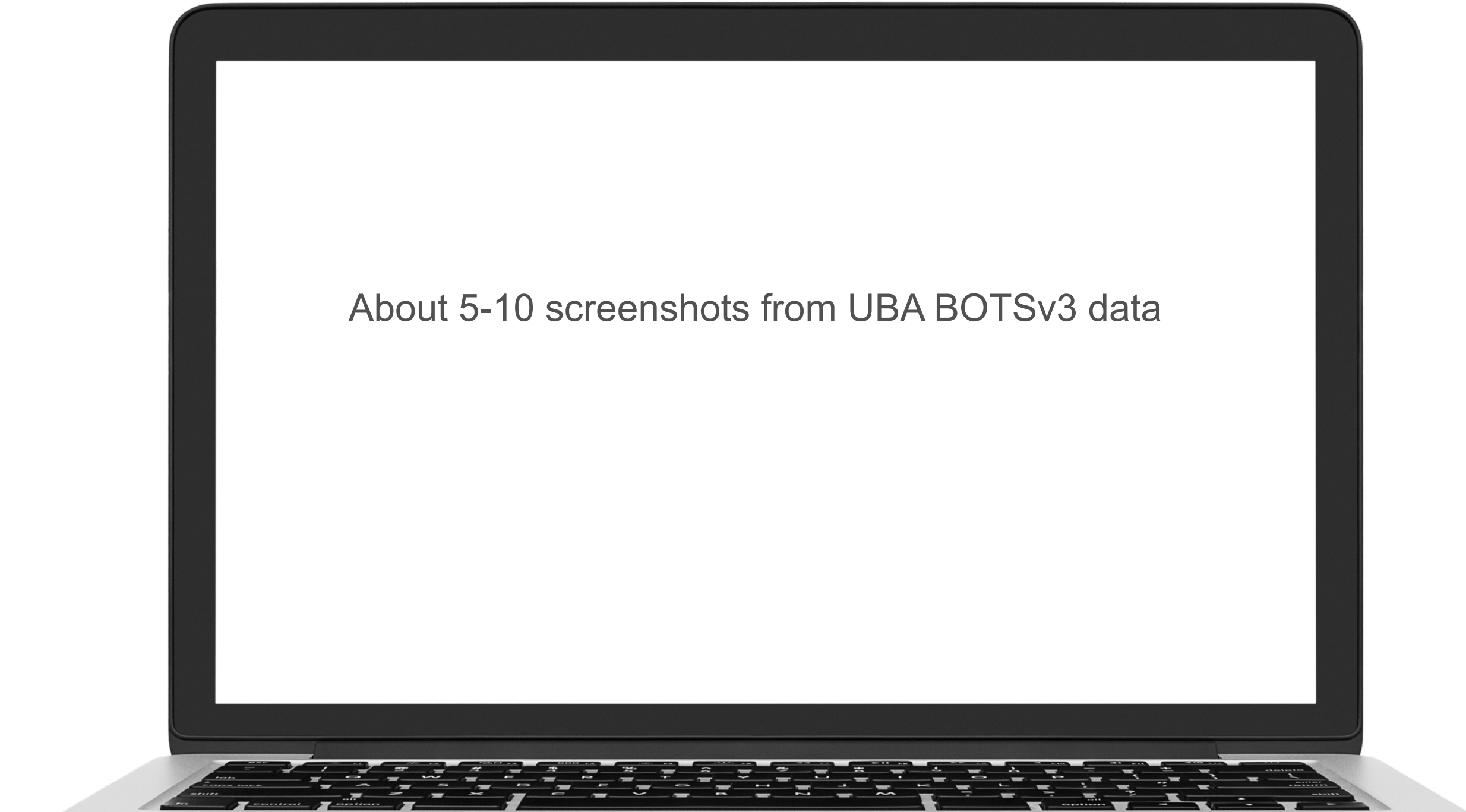
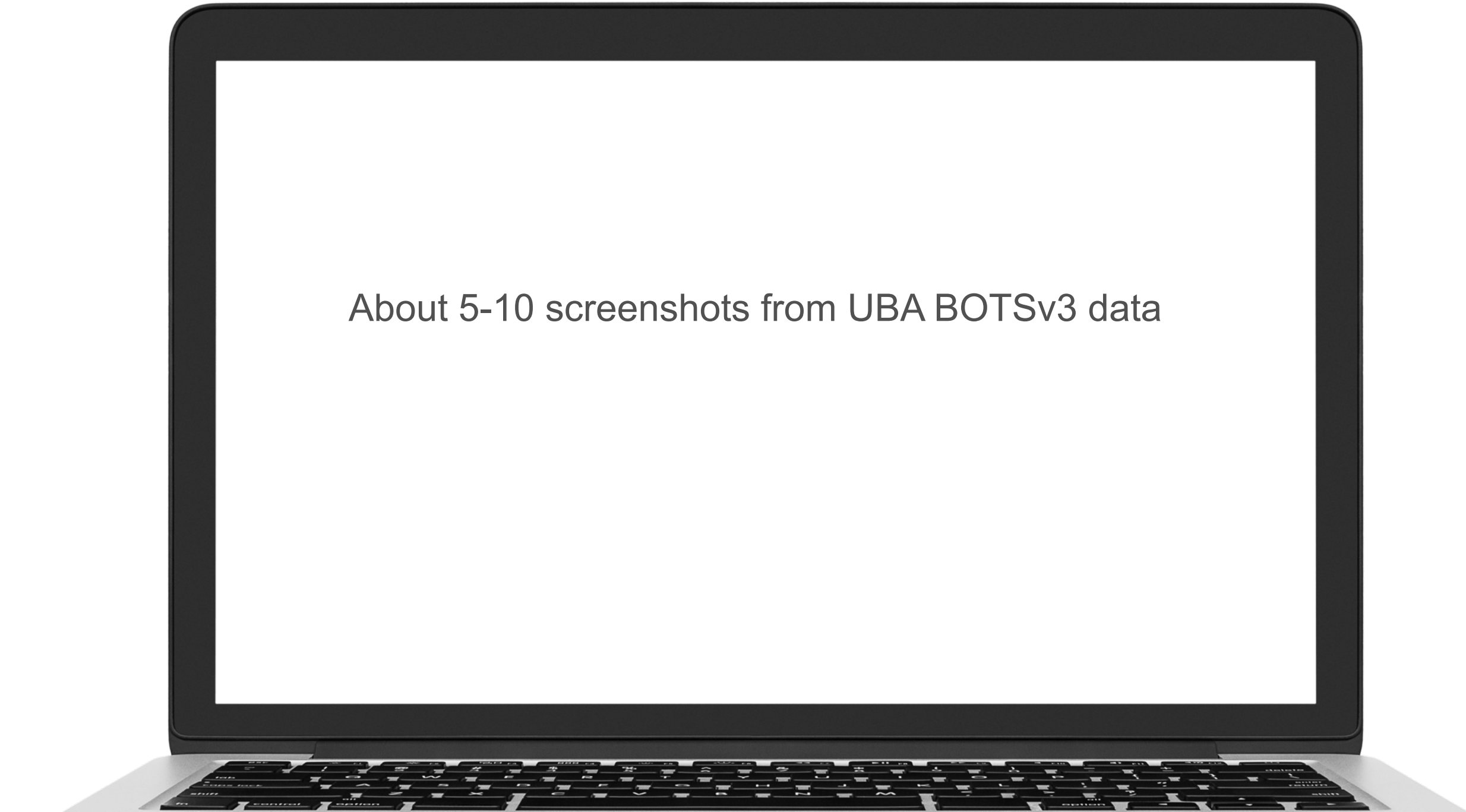
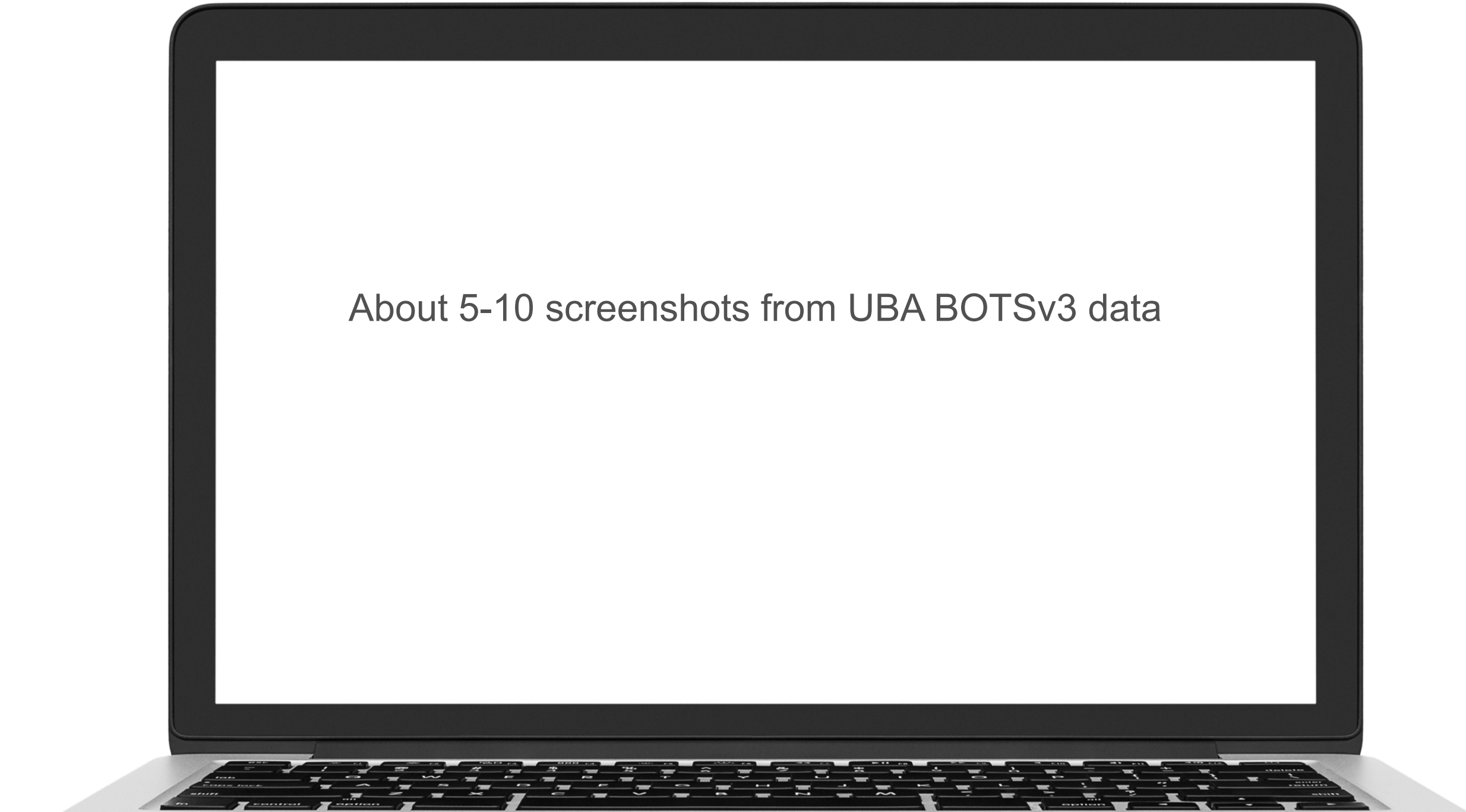
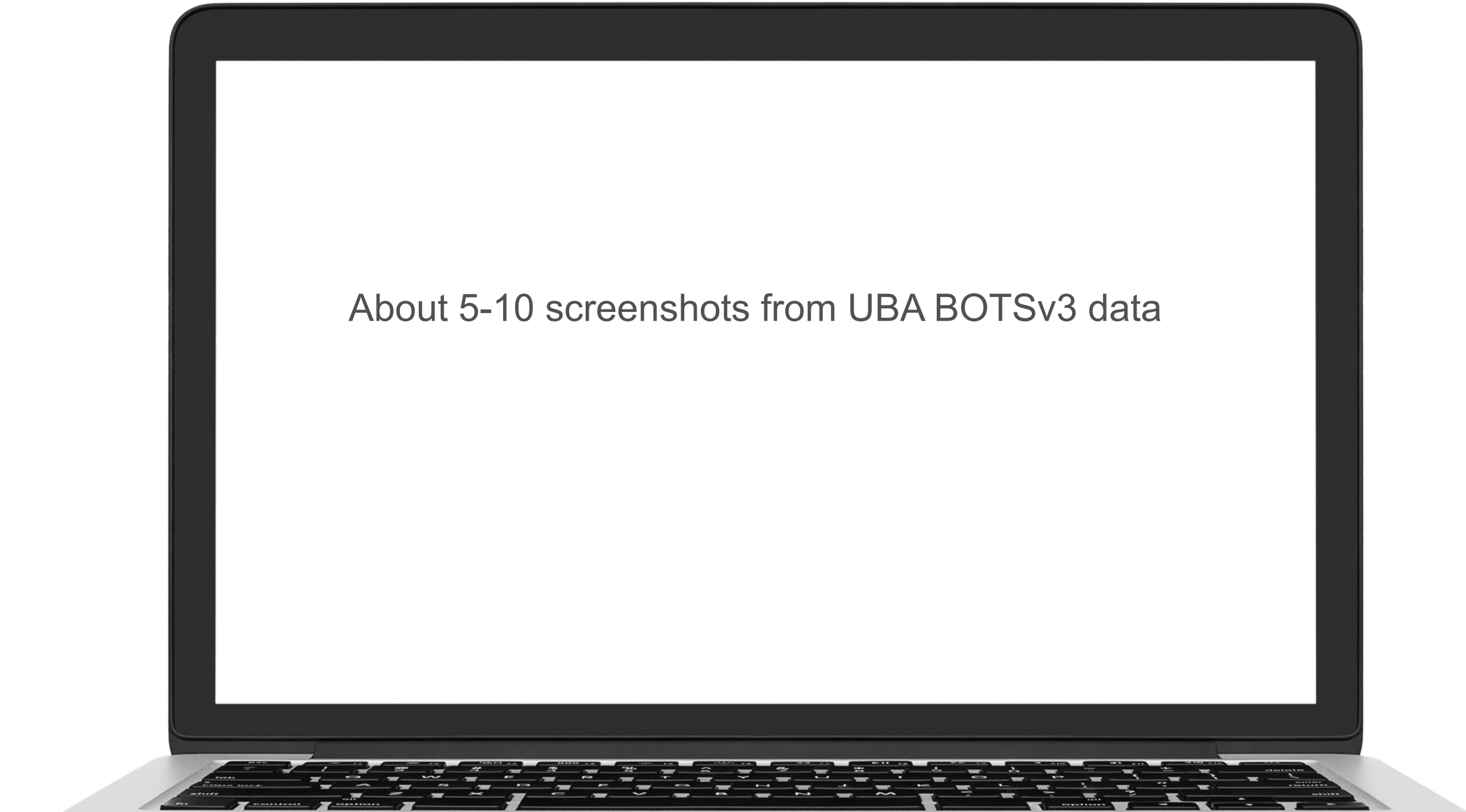


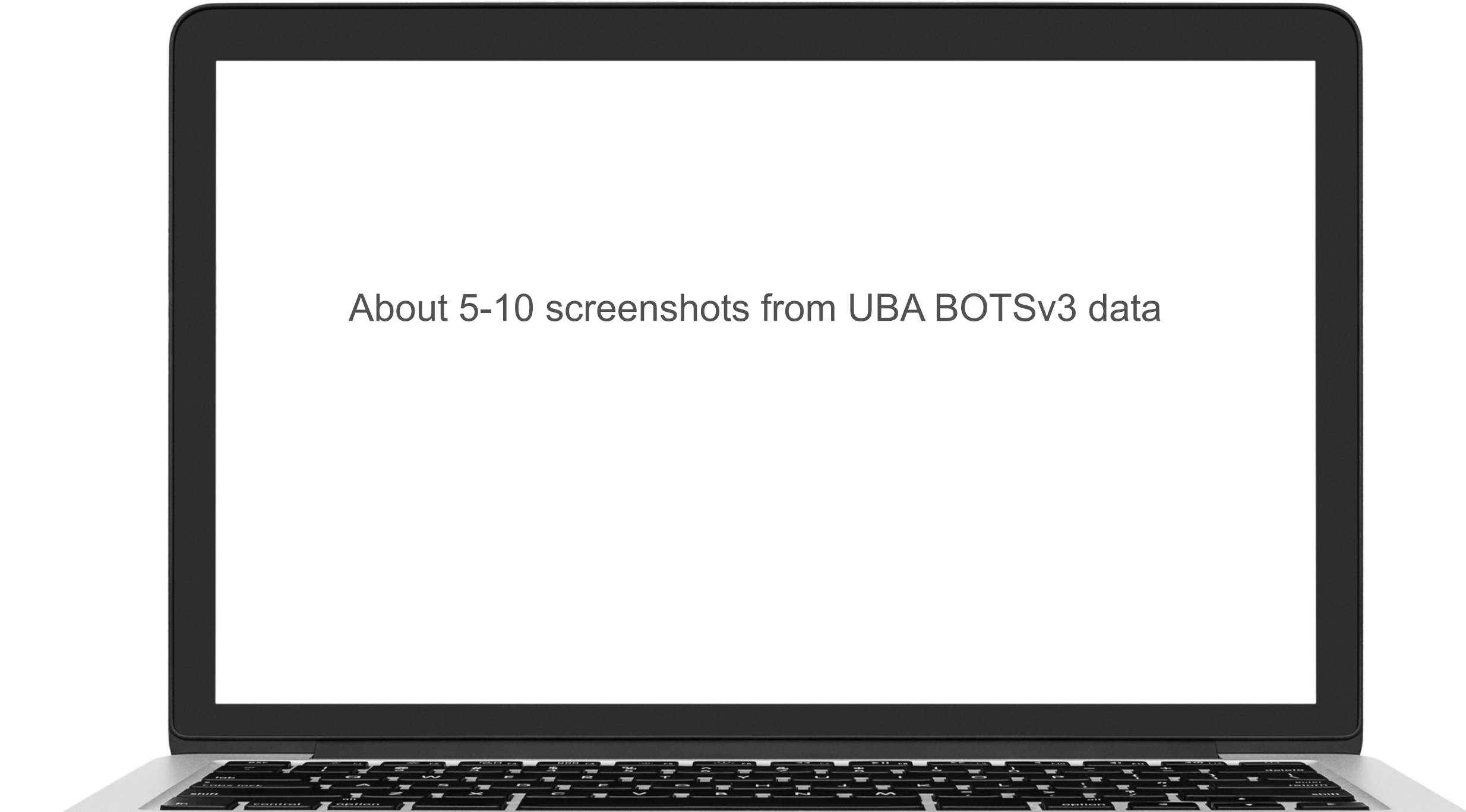










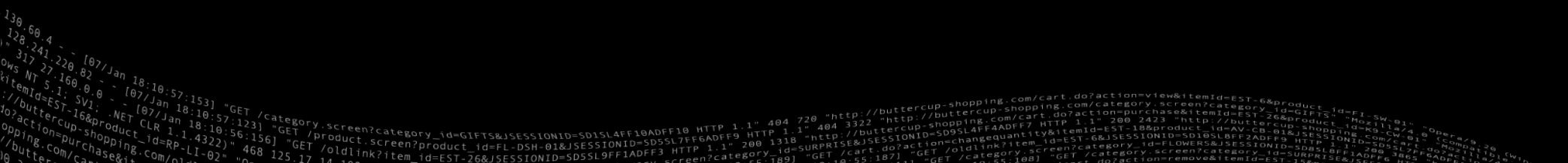


Best and Worst Practices

To do and *not* to do!

Quick Agenda

- Each Section Here
  - First Slide: Bad things we've seen in the field
  - Subsequent Slides: How to combat those things
- Pre-Requisites and Configuration
- Data Onboarding
- Usage and Integrations



Pre-Requisites and Configuration

Keep your arms and hands inside the tram at all times

Worst Practices

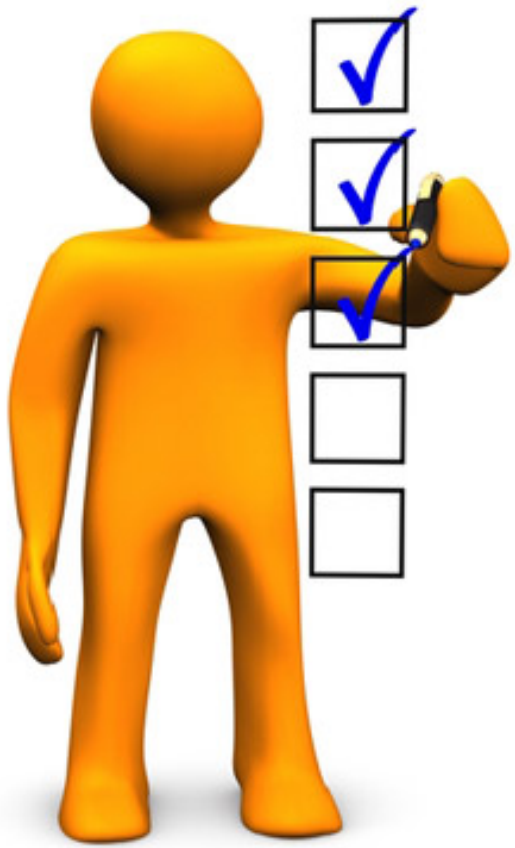
Break all the things!

- Undersize your environment
  - Decrease logging to meet sizing
- Block port 80/443
- Change file system permissions on the OVA/AMI
- Install custom kernels on Red Hat
- Block real time search
- Tinker!

Best Practices

Meet all the pre-requisites

- Real time required (recommend indexed real time)
- DNS/DHCP, Windows Security Logs, Proxy, and Firewall required
- Asset information
- IOPS at 800+
- Network ports open
- Use cases well defined
- For more information: http://docs.splunk.com/Documentation/UBA/4.1.2/Install/Requirements



Best Practices

Sizing and Configuration

Size of cluster	Max events per second capacity	Number of accounts	Number of devices
1	4K	up to 50K	up to 100K
3	12K	up to 50K	up to 200K
5	20K	up to 200K	up to 300K
7	28K	up to 350K	up to 500K
10	40K-45K	up to 350K	up to 500K
20	75K-80K	up to 750K	up to 1 Million

- Sizing exercise with you Splunk SME to verify data load
- 16 Core/64 RAM is set – throwing 96 cores at it will not affect data processing
- 50 GB/1 TB drives are required – SSD preferred
- AMI and OVA are available

Data Onboarding

Let’s get rolling already

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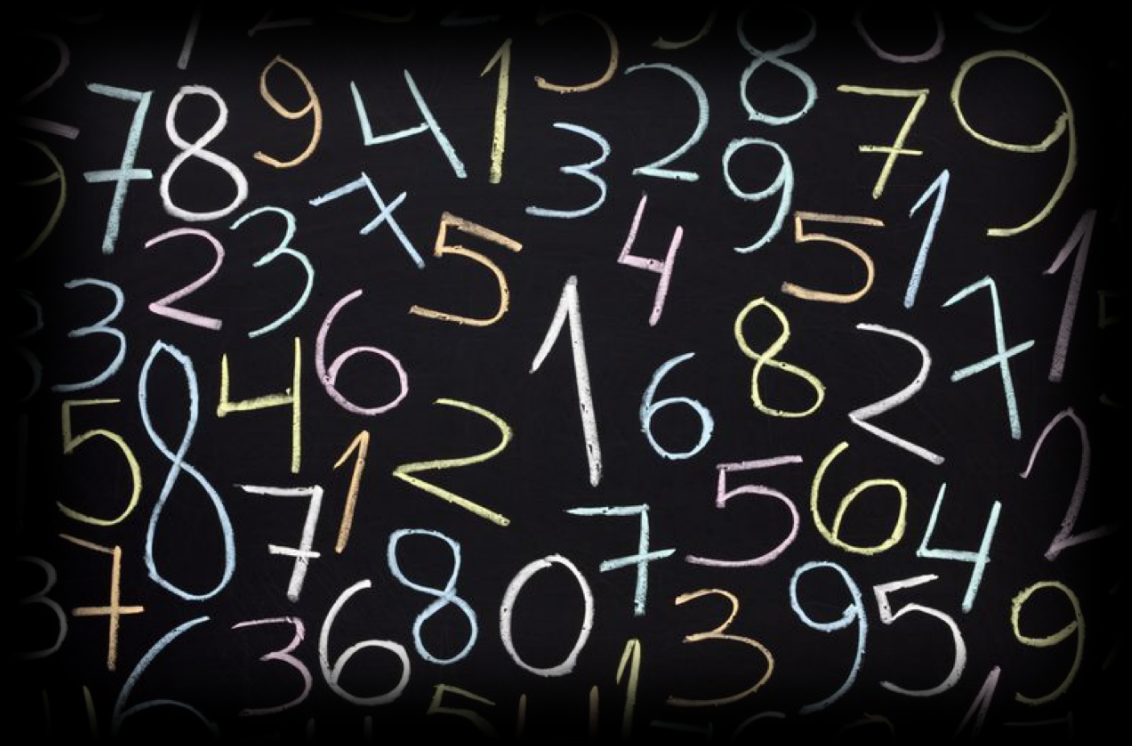
Worst Practices

Data Onboarding

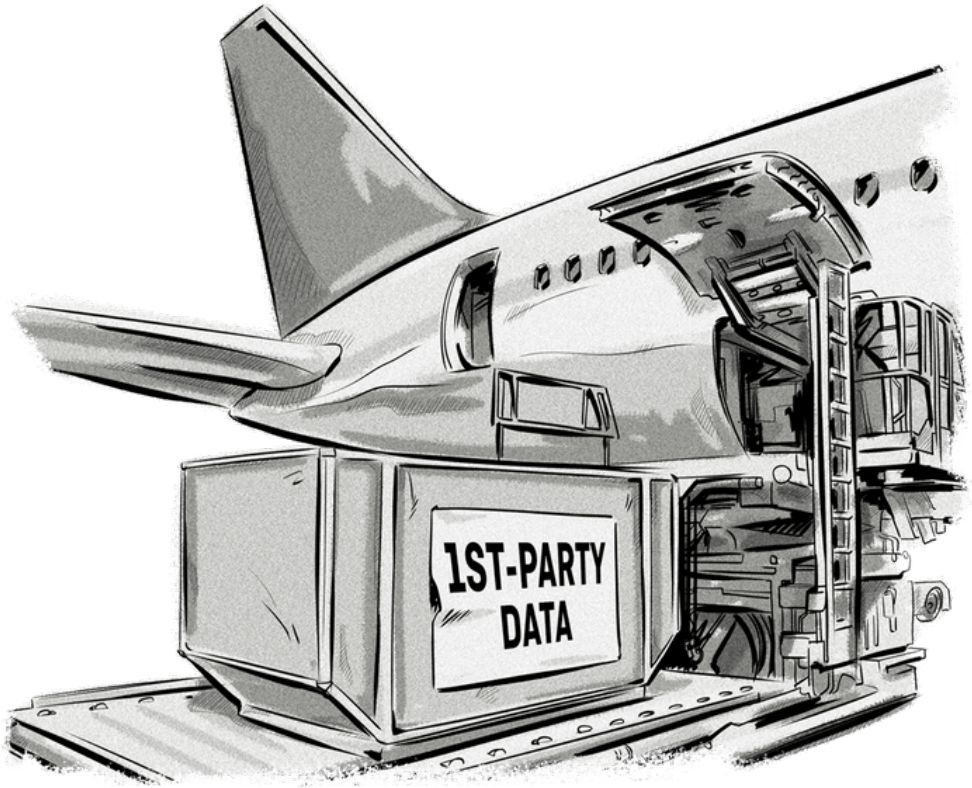


- Cut back on data to meet sizing/data requirements
- Logging only blocked traffic
- Proxy logging with audit information (bytes in/out)
- Ignoring bursts of data or inconsistencies in sizing
- Using Technical Add-ons (TAs) that are not CIM compliant (or no TA at all)
- Logging any of the required data sources without all data
- Using Windows DNS without Stream
- Logging only specific users/groups

Best Practices

Data Onboarding

- Data should be CIM compliant
- All users' data should be onboarded
- Full DHCP and DNS (including queries and responses) should be in Splunk
- Take time to ensure HR data is correct before onboarding other data



Usage and Integrations

What does this button do?

Worst Practices

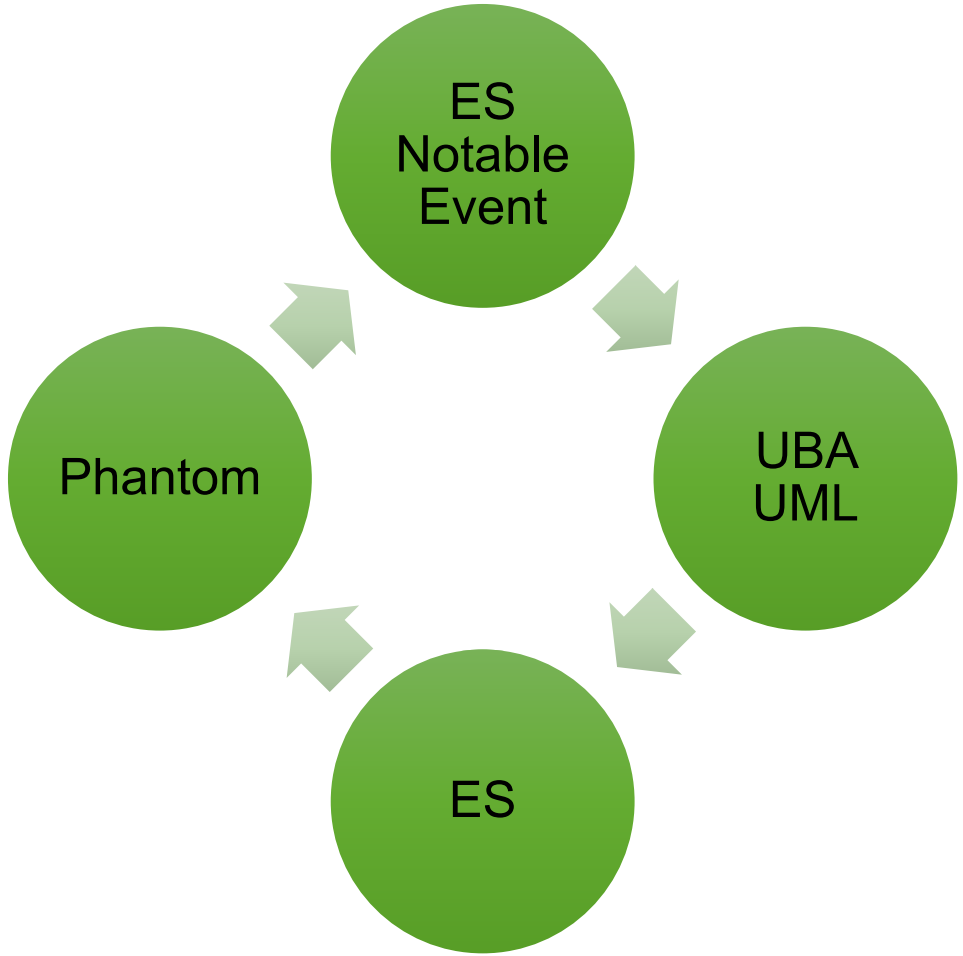
Usage and Integrations

- Trying to do everything inside of UBA
- Creating a bunch of basic correlation rules inside of UBA
- Trying to integrate everything in UBA that you already have integrated in Splunk
- Treat UBA as a stand alone platform in your environment

Best Practices

Usage and Integrations

- Pull in correlation notable events from ES
- Send anomalies back to ES and the ES risk framework – see Apger's risk deck for more!
- Send threats back to ES as notable events
- Reactions and responses to UBA data should be done through Splunk
- Take the online training!
- Follow the following methodology!

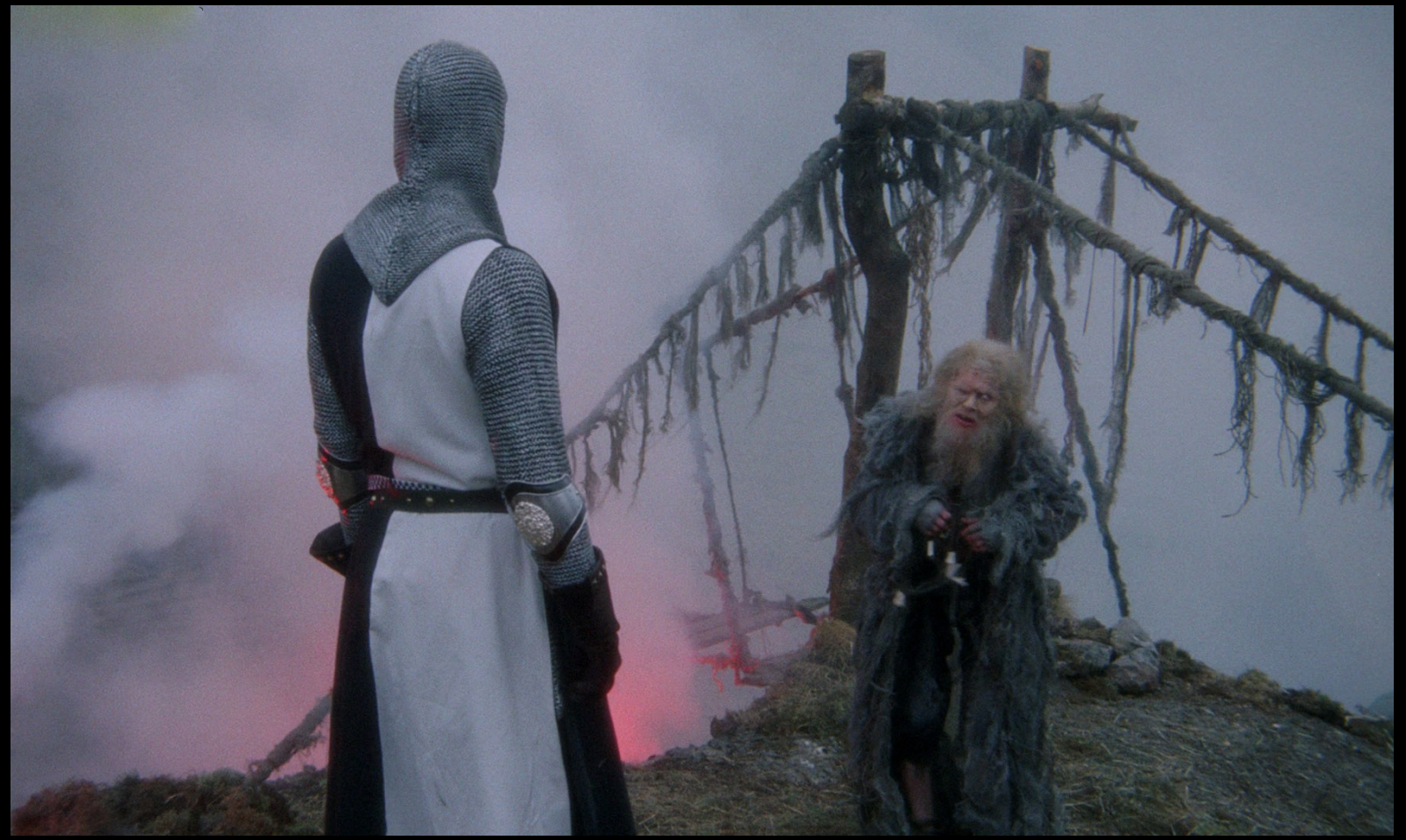


Where Do I Go from Here?

- Product Page: https://www.splunk.com/en_us/software/user-behavior-analytics.html
- UBA White Papers
  - https://www.splunk.com/pdfs/product-briefs/splunk-uba.pdf
  - https://www.splunk.com/pdfs/technical-briefs/using-splunk-uba-to-detect-cyber-attacks.pdf
  - https://www.splunk.com/pdfs/technical-briefs/using-splunk-uba-to-detect-insider-threats.pdf
- UBA Demo – reach out to your Splunk rep!
- UBA Test Drive – reach out to your Splunk rep!
- Coming soon!!!! – Threat Hunting on UBA Workshop (new year)

Ask Me Anything!

Well, not anything, it should be about Splunk or UBA



Thank You

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