

THE DATA EXFILTRATION CHALLENGE

C S A P
1 1 2 2



You've
usurped
USB-Eugene!

B64 Encode Data
+2 Points if Alerted

./Start	\$ USB	\$ SMTP	\$ Cloud Stg.	\$ Web Chat
	C S A P	C S A P	C S A P	C S A P



Great job! Malicious-
Mike has learned his
lesson

Try SCP
+2 Points if
Prevented

B64 Encode Data
+2 Points if Alerted

You need
14
Points
to Cont.

\$ HTTP POST	\$ Social Media	\$ FTP	\$ Web Doc
C S A P	C S A P	C S A P	C S A P

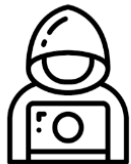
You need
16
Points
to Cont.

B64 Encode Data
+2 Points if Alerted

# HTTP Params	# IRC/XMPP	# SMB	# HTTPS POST
C S A P	C S A P	C S A P	C S A P



Hacker-Hank
has been
handled...



With APT-Adam
addressed, your
data is safe!

You
Need
14
Points
to Cont.

^ C	\$ DNS A	\$ HTTP Cookie	\$ DNS TXT
	C S A P	C S A P	C S A P

THE DATA EXFILTRATION CHALLENGE

Preparing for the Challenge

1. Generate a data file containing (mock!) sensitive data.
2. Prepare your infrastructure: test host, external servers, cloud service provider accounts, etc.
3. Get approval to test from the appropriate group(s) in your org
4. Select a token to move across the game board
5. Start at the "./Start" spot and end at "^C"

Playing

- Start at the first game board spot ("USB")
- Perform the appropriate test for that spot
 - Mark the response that was taken (see responses to the right), or don't mark anything if there was no response
 - Move to the next space
- If you encounter a "You need X Points to Continue" space, sum your points using the scale to the right and move forward if you have enough points

Keeping Score

C	S	A	P
1	1	2	2

C

Control - The activity was logged in the relevant security control - 1 point

S

SIEM - The activity was logged in the SIEM - 1 point

A

Alert - An alert was generated in the SIEM and made it to the SOC - 2 points

P

Prevented - The activity was blocked by a control - 2 points

USB: Transfer your test file to a USB drive, confirm the file can be read on another device

SMTP: Send out an email via SMTP that has your test data as an attachment or in the body

Cloud Storage: Transfer your file to a cloud storage (ex: Google Drive) account

Web Chat: Send your data over a web chat app (ex: Google Hangouts)

Web Doc: Enter your data into a web document (ex: Google Docs)

FTP: Transfer your data to an external FTP server

Social Media: Put your data on Twitter! (please ensure it's mock data...)

HTTP POST: Upload your data via an HTTP POST form

HTTP Params: Embed your data in HTTP query parameters

IRC/XMPP: Send your data via IRC or XMPP

SMB: Upload your data to an external SMB server

DNS TXT: Embed your data in a DNS TXT query and send the query to an external server

HTTP Cookie: Embed your data in an HTTP cookie and send the request to an external server

DNS A: Embed your data into a DNS A query and send the query to an external server

