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nuix

# It’s What’s Inside That Counts

Transforming Investigations to Detect and Prevent Insider Threat

175 MAKING AN IMPACT THAT MATTERS since 1845

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Intro

### Speakers

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### Agenda

- Challenges
- Overview of Nuix Adaptive Security
- Walkthrough of scenarios
- Summary and questions

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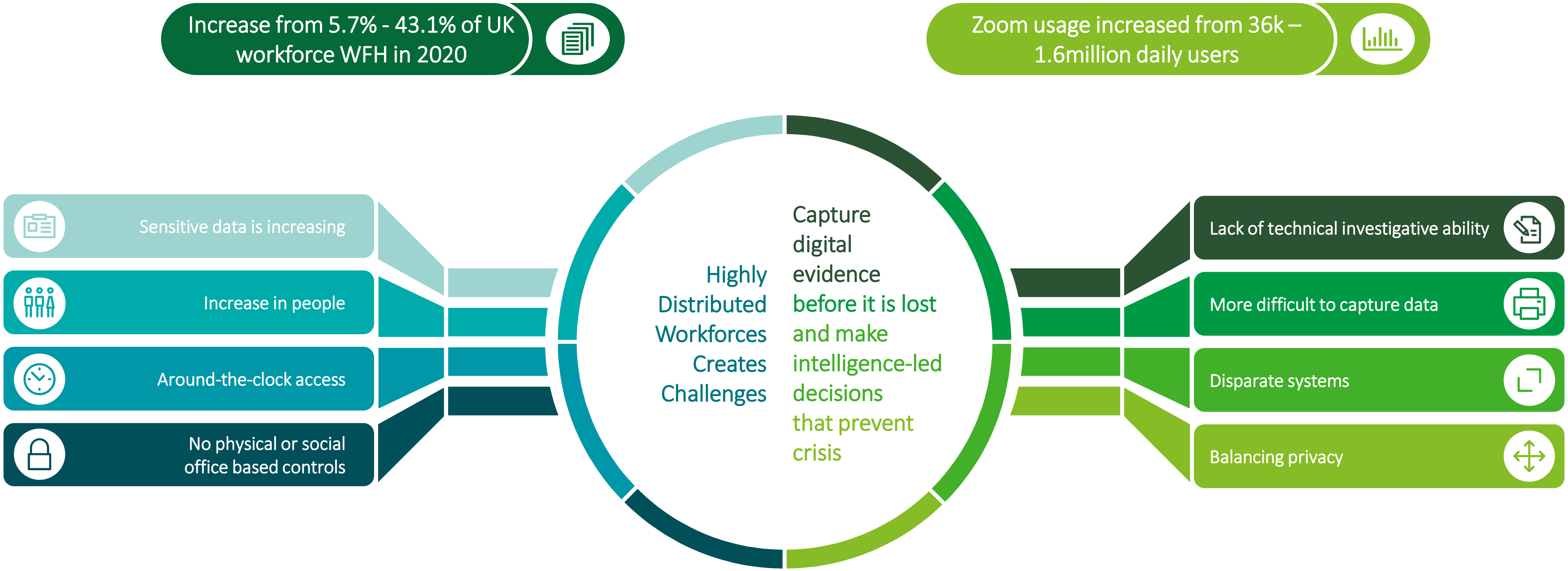
# Challenges

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Challenges



Increase from 5.7% - 43.1% of UK workforce WFH in 2020

Zoom usage increased from 36k – 1.6million daily users

Sensitive data is increasing

Increase in people

Around-the-clock access

No physical or social office based controls

Highly Distributed Workforces Creates Challenges

Capture digital evidence before it is lost and make intelligence-led decisions that prevent crisis

Lack of technical investigative ability

More difficult to capture data

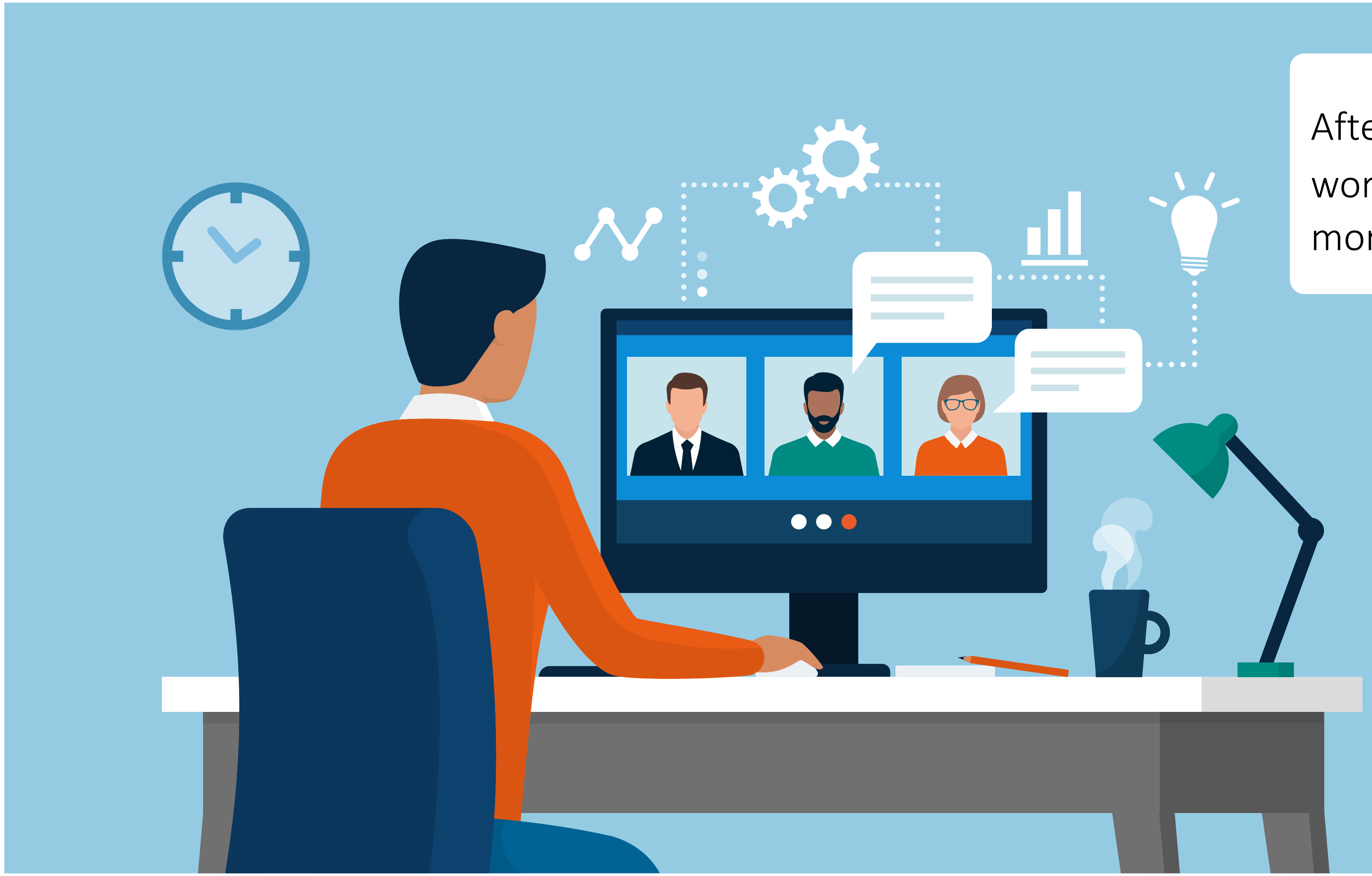
Disparate systems

Balancing privacy

https://wiserd.ac.uk/sites/default/files/documents/Homeworking%20in%20the%20UK_Report_Final_3.pdf
https://www.statista.com/statistics/1118860/zoom-daily-active-users-uk

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Is remote working here to stay?

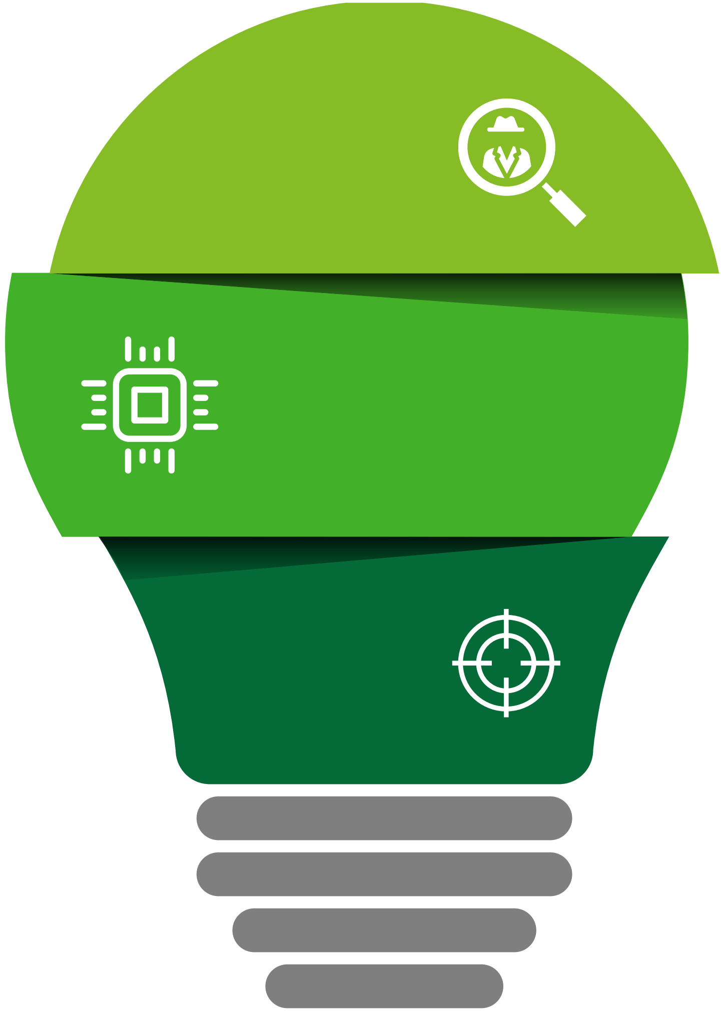


After lockdown **61%** of desk-based workers would prefer to work from home more often

Research was carried out by Ipsos MORI on behalf of Deloitte LLP. It screened a nationally representative quota sample of 2,213 UK adults, filtered to a sample of 1,321 workers aged 16-75, using its Online Omnibus.
https://www2.deloitte.com/uk/en/pages/consulting/articles/working-during-lockdown-impact-of-covid-19-on-productivity-and-wellbeing.html

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

Using technology to address some of our challenges



Enhance your **investigative agility** by combining monitoring with advanced triage in one unified platform. **Drive confidence and reduce effort.**

Use endpoint based technology **that monitor both user and system behaviour**, regardless of location, in real-time.

Being able to have a **targeted and bespoke approach** to specific issues, **reduce false-positives** and **over-collection of data** while speeding up detection.

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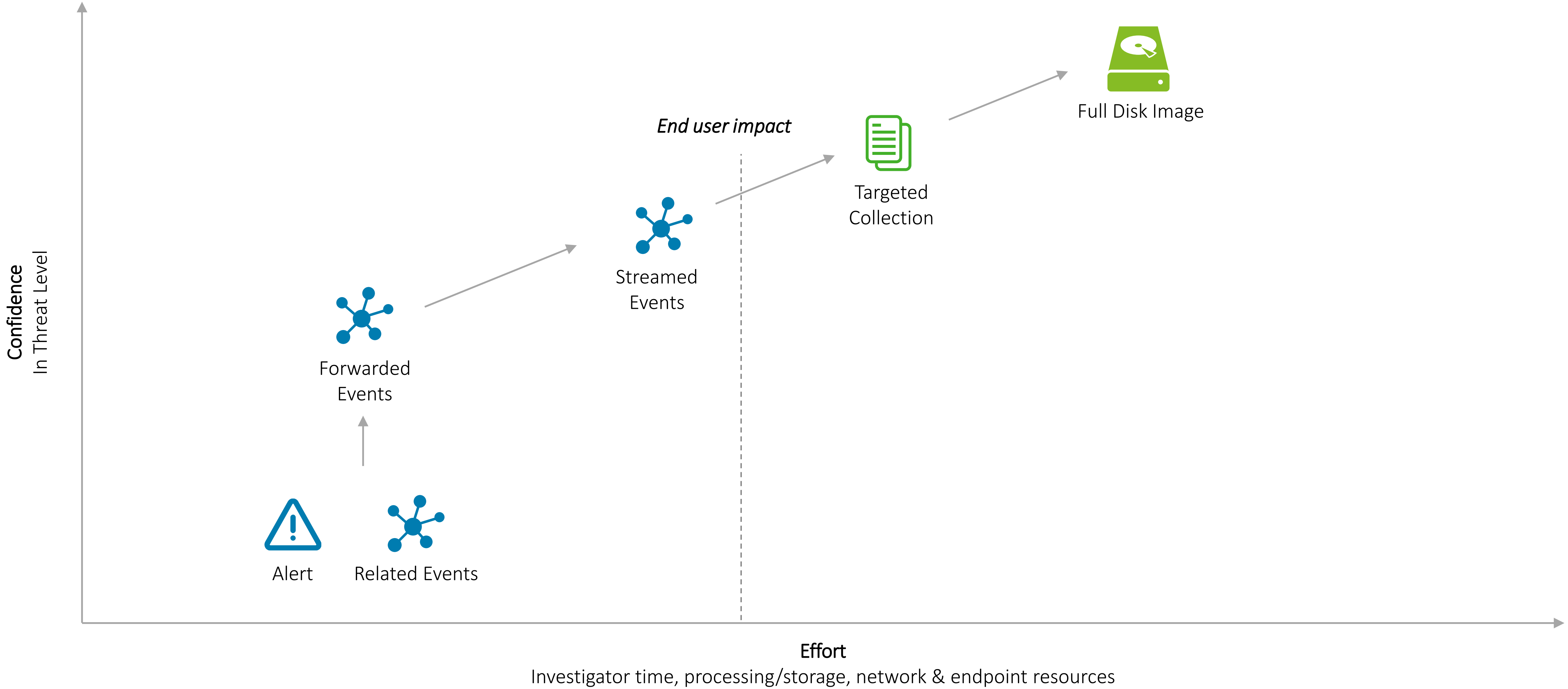
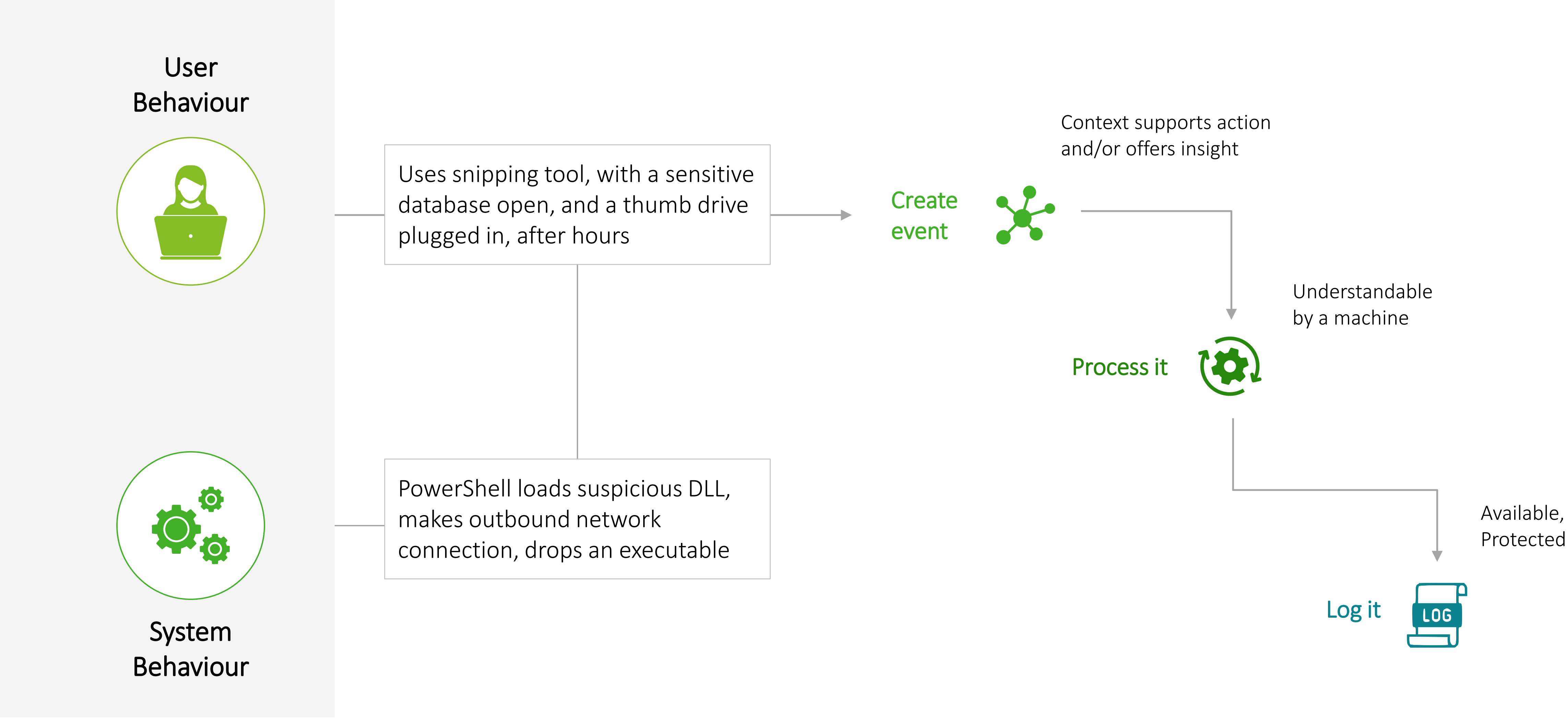
## Investigative agility



# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Event-based detection and triage



User Behaviour

Uses snipping tool, with a sensitive database open, and a thumb drive plugged in, after hours

System Behaviour

PowerShell loads suspicious DLL, makes outbound network connection, drops an executable

Create event

Context supports action and/or offers insight

Process it

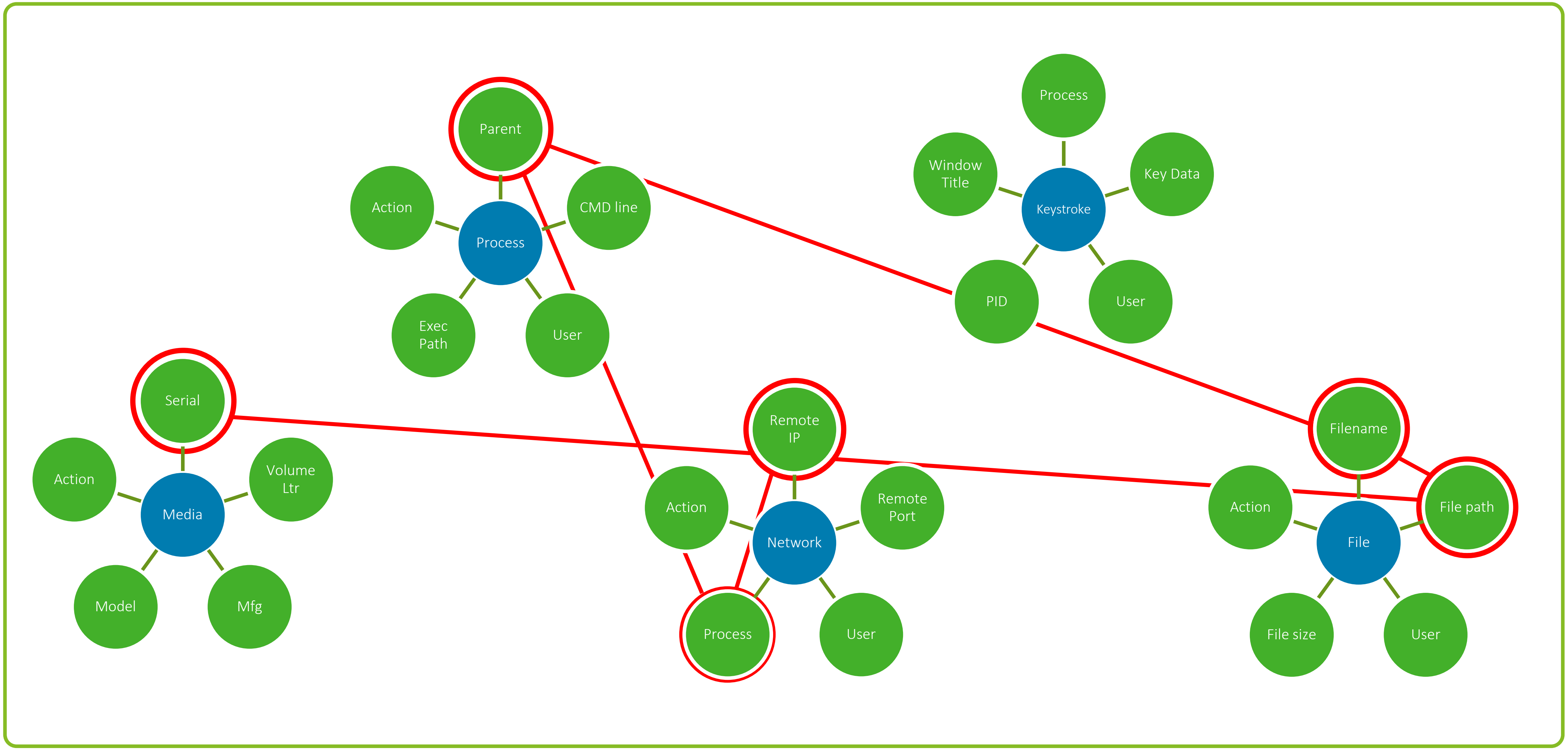
Understandable by a machine

Log it

Available, Protected

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## What is an event?



# Product Overview

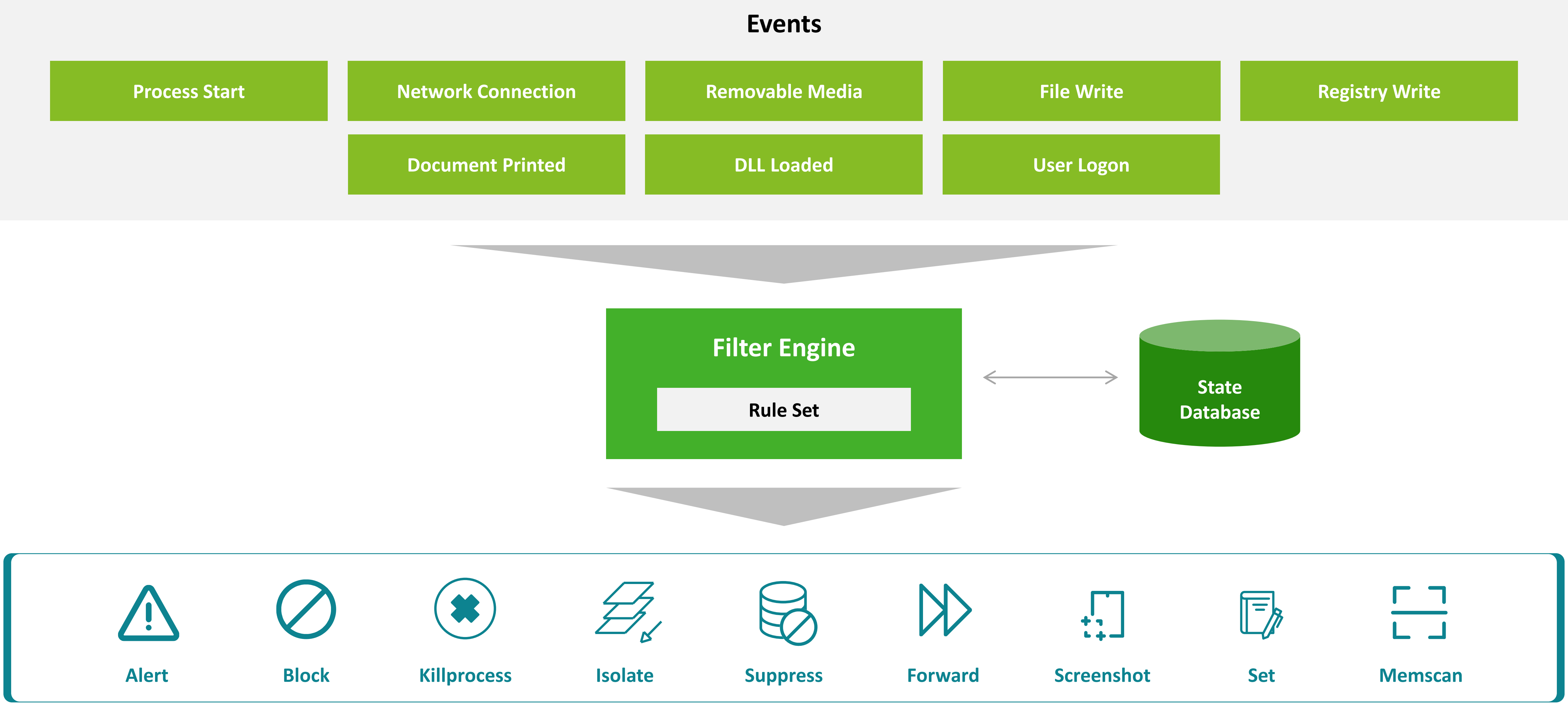
# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Product Overview – Nuix Adaptive Security

- Bespoke rule creating process to mould to your business needs and environments.
- Lightweight agent deployed on the network stores events and sends alerts back to server.
- Offline endpoints log events and alerts locally, reconnecting at next opportunity.
- Keyword searching of endpoints on the fly.
- Record screenshots, keylogs and clipboard information from endpoints and alert when certain conditions are met:
  - Keyword is met
  - Data copied onto a USB.
  - User logs in remotely, then attempts to upload data.
- Isolate endpoints that you believe to have been compromised (insider/external threats).

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

Nuix Adaptive Security



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# Scenario 1 - Data Theft and Disclosure

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 1 – Data Theft and Disclosure

### Sell sensitive research to a competitor

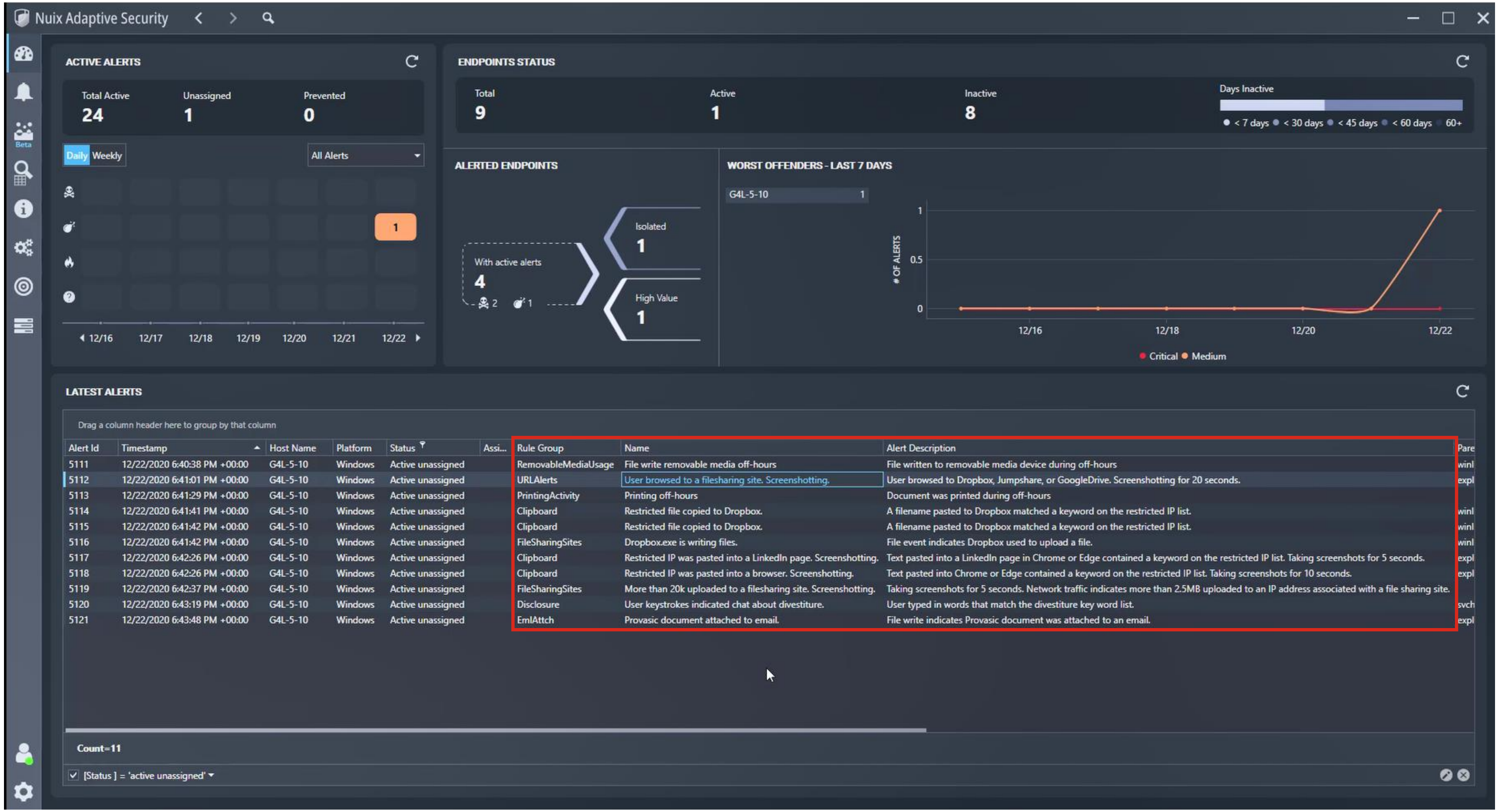
- Acquires report
- Pastes some of the data into a chat window
- Copies to removable media
- Uploads to a file sharing service via browser
- Uploads to a file sharing service via local client
- Prints it

### Discuss a sensitive transaction before it closes

- Mentions transaction in chat
- Attaches document to email

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 1 – Data Theft and Disclosure



ACTIVE ALERTS

Total Active 24
Unassigned 1
Prevented 0

ENDPOINTS STATUS

Total 9
Active 1
Inactive 8

ALERTED ENDPOINTS

WORST OFFENDERS - LAST 7 DAYS

LATEST ALERTS

Drag a column header here to group by that column

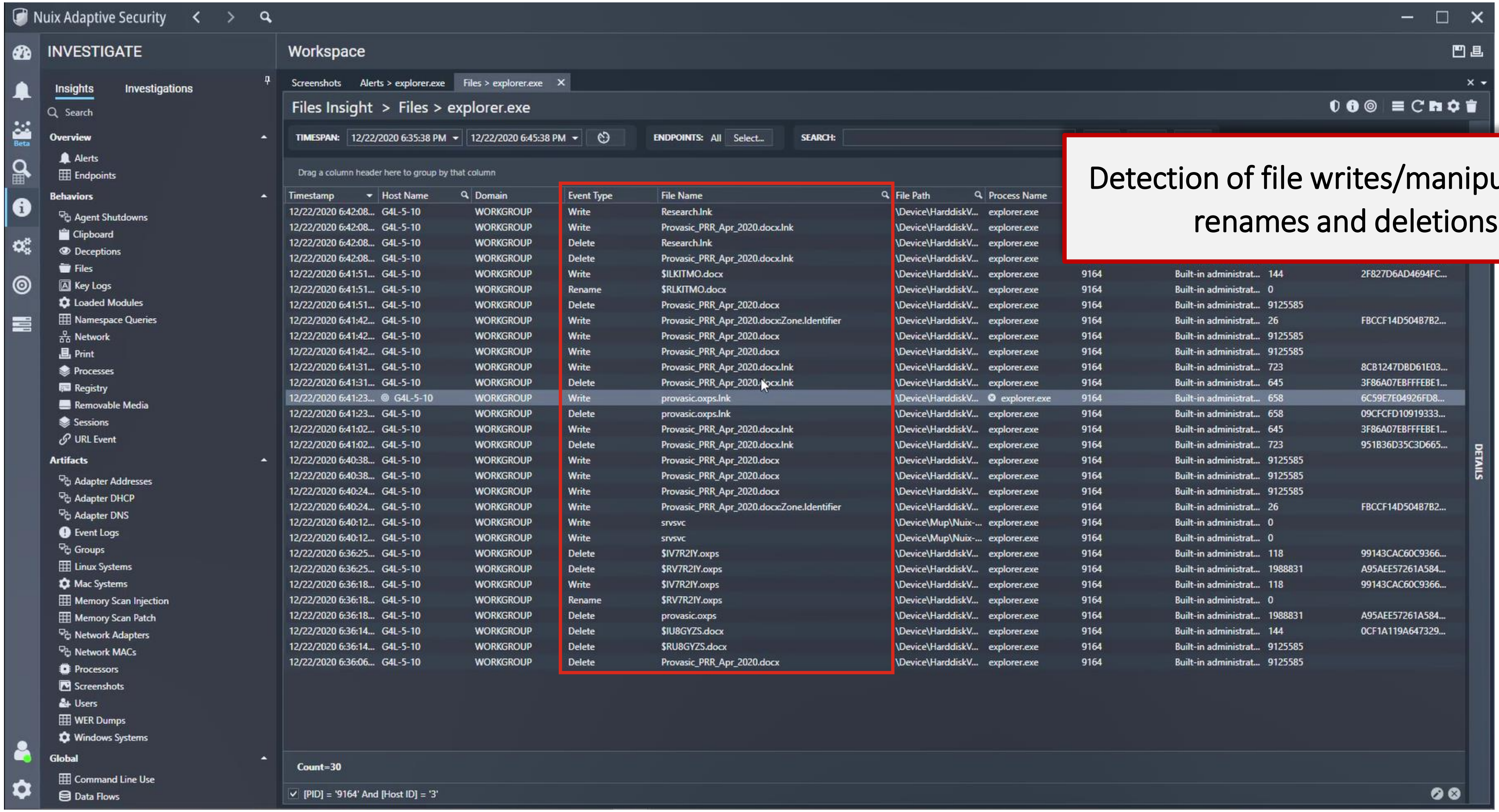
| Alert Id | Timestamp | Host Name | Platform | Status | Assi... | Rule Group | Name | Alert Description | Pare |
|---|---|---|---|---|---|---|---|---|---|
| 5111 | 12/22/2020 6:40:38 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | RemovableMediaUsage | File write removable media off-hours | File written to removable media device during off-hours | winl |
| 5112 | 12/22/2020 6:41:01 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | URLAlerts | User browsed to a filesharing site. Screenshotting. | User browsed to Dropbox, Jumpshare, or GoogleDrive. Screenshotting for 20 seconds. | expl |
| 5113 | 12/22/2020 6:41:29 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | PrintingActivity | Printing off-hours | Document was printed during off-hours |  |
| 5114 | 12/22/2020 6:41:41 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | Clipboard | Restricted file copied to Dropbox. | A filename pasted to Dropbox matched a keyword on the restricted IP list. | winl |
| 5115 | 12/22/2020 6:41:42 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | Clipboard | Restricted file copied to Dropbox. | A filename pasted to Dropbox matched a keyword on the restricted IP list. | winl |
| 5116 | 12/22/2020 6:41:42 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | FileSharingSites | Dropbox.exe is writing files. | File event indicates Dropbox used to upload a file. | winl |
| 5117 | 12/22/2020 6:42:26 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | Clipboard | Restricted IP was pasted into a LinkedIn page. Screenshotting. | Text pasted into a LinkedIn page in Chrome or Edge contained a keyword on the restricted IP list. Taking screenshots for 5 seconds. | expl |
| 5118 | 12/22/2020 6:42:26 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | Clipboard | Restricted IP was pasted into a browser. Screenshotting. | Text pasted into Chrome or Edge contained a keyword on the restricted IP list. Taking screenshots for 10 seconds. | expl |
| 5119 | 12/22/2020 6:42:37 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | FileSharingSites | More than 20k uploaded to a filesharing site. Screenshotting. | Taking screenshots for 5 seconds. Network traffic indicates more than 2.5MB uploaded to an IP address associated with a file sharing site. |  |
| 5120 | 12/22/2020 6:43:19 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | Disclosure | User keystrokes indicated chat about divestiture. | User typed in words that match the divestiture key word list. | svch |
| 5121 | 12/22/2020 6:43:48 PM +00:00 | G4L-5-10 | Windows | Active unassigned |  | EmlAttch | Provasic document attached to email. | File write indicates Provasic document was attached to an email. | expl |

Count=11

☑ [Status ] = 'active unassigned'

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 1 – Data Theft and Disclosure



Files Insight > Files > explorer.exe

TIMESPAN: 12/22/2020 6:35:38 PM – 12/22/2020 6:45:38 PM  ENDPOINTS: All Select...  SEARCH:

Drag a column header here to group by that column

| Timestamp | Host Name | Domain | Event Type | File Name | File Path | Process Name | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 12/22/2020 6:42:08... | G4L-5-10 | WORKGROUP | Write | Research.lnk | \Device\HarddiskV... | explorer.exe | | | | |
| 12/22/2020 6:42:08... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx.lnk | \Device\HarddiskV... | explorer.exe | | | | |
| 12/22/2020 6:42:08... | G4L-5-10 | WORKGROUP | Delete | Research.lnk | \Device\HarddiskV... | explorer.exe | | | | |
| 12/22/2020 6:42:08... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx.lnk | \Device\HarddiskV... | explorer.exe | | | | |
| 12/22/2020 6:41:51... | G4L-5-10 | WORKGROUP | Write | $ILKITMO.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 144 | 2F827D6AD4694FC... |
| 12/22/2020 6:41:51... | G4L-5-10 | WORKGROUP | Rename | $RLKITMO.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 0 | |
| 12/22/2020 6:41:51... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 9125585 | |
| 12/22/2020 6:41:42... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx:Zone.Identifier | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 26 | FBCCF14D504B7B2... |
| 12/22/2020 6:41:42... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 9125585 | |
| 12/22/2020 6:41:42... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 9125585 | |
| 12/22/2020 6:41:31... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx.lnk | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 723 | 8CB1247DBD61E03... |
| 12/22/2020 6:41:31... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx.lnk | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 645 | 3F86A07EBFFFEBE1... |
| 12/22/2020 6:41:23... | G4L-5-10 | WORKGROUP | Write | provasic.oxps.lnk | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 658 | 6C59E7E04926FD8... |
| 12/22/2020 6:41:23... | G4L-5-10 | WORKGROUP | Delete | provasic.oxps.lnk | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 658 | 09CFCFD10919333... |
| 12/22/2020 6:41:02... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx.lnk | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 645 | 3F86A07EBFFFEBE1... |
| 12/22/2020 6:41:02... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx.lnk | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 723 | 951B36D35C3D665... |
| 12/22/2020 6:40:38... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 9125585 | |
| 12/22/2020 6:40:38... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 9125585 | |
| 12/22/2020 6:40:24... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 9125585 | |
| 12/22/2020 6:40:24... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx:Zone.Identifier | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 26 | FBCCF14D504B7B2... |
| 12/22/2020 6:40:12... | G4L-5-10 | WORKGROUP | Write | srvsvc | \Device\Mup\Nuix-... | explorer.exe | 9164 | Built-in administrat... | 0 | |
| 12/22/2020 6:40:12... | G4L-5-10 | WORKGROUP | Write | srvsvc | \Device\Mup\Nuix-... | explorer.exe | 9164 | Built-in administrat... | 0 | |
| 12/22/2020 6:36:25... | G4L-5-10 | WORKGROUP | Delete | $IV7R2IY.oxps | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 118 | 99143CAC60C9366... |
| 12/22/2020 6:36:25... | G4L-5-10 | WORKGROUP | Delete | $RV7R2IY.oxps | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 1988831 | A95AEE57261A584... |
| 12/22/2020 6:36:18... | G4L-5-10 | WORKGROUP | Write | $IV7R2IY.oxps | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 118 | 99143CAC60C9366... |
| 12/22/2020 6:36:18... | G4L-5-10 | WORKGROUP | Rename | $RV7R2IY.oxps | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 0 | |
| 12/22/2020 6:36:18... | G4L-5-10 | WORKGROUP | Delete | provasic.oxps | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 1988831 | A95AEE57261A584... |
| 12/22/2020 6:36:14... | G4L-5-10 | WORKGROUP | Delete | $IU8GYZS.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 144 | 0CF1A119A647329... |
| 12/22/2020 6:36:14... | G4L-5-10 | WORKGROUP | Delete | $RU8GYZS.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 9125585 | |
| 12/22/2020 6:36:06... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | explorer.exe | 9164 | Built-in administrat... | 9125585 | |

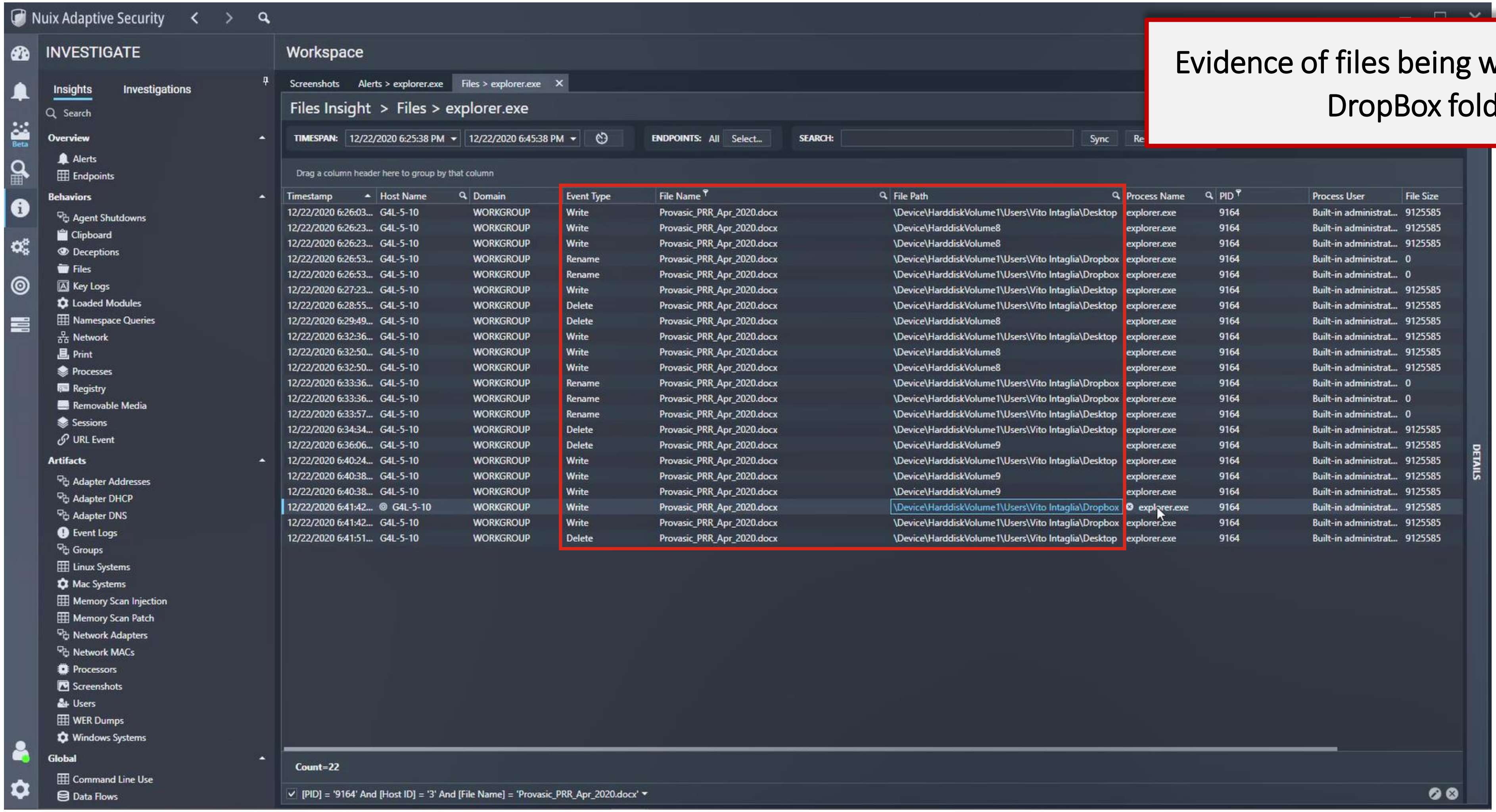
Count=30

☑ [PID] = '9164' And [Host ID] = '3'

Detection of file writes/manipulations, renames and deletions

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 1 – Data Theft and Disclosure



Files Insight > Files > explorer.exe

TIMESPAN: 12/22/2020 6:25:38 PM – 12/22/2020 6:45:38 PM  ENDPOINTS: All Select...  SEARCH:

Drag a column header here to group by that column

| Timestamp | Host Name | Domain | Event Type | File Name | File Path | Process Name | PID | Process User | File Size |
|---|---|---|---|---|---|---|---|---|---|
| 12/22/2020 6:26:03... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Desktop | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:26:23... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume8 | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:26:23... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume8 | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:26:53... | G4L-5-10 | WORKGROUP | Rename | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Dropbox | explorer.exe | 9164 | Built-in administrat... | 0 |
| 12/22/2020 6:26:53... | G4L-5-10 | WORKGROUP | Rename | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Dropbox | explorer.exe | 9164 | Built-in administrat... | 0 |
| 12/22/2020 6:27:23... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Desktop | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:28:55... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Desktop | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:29:49... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume8 | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:32:36... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Desktop | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:32:50... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume8 | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:32:50... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume8 | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:33:36... | G4L-5-10 | WORKGROUP | Rename | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Dropbox | explorer.exe | 9164 | Built-in administrat... | 0 |
| 12/22/2020 6:33:36... | G4L-5-10 | WORKGROUP | Rename | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Dropbox | explorer.exe | 9164 | Built-in administrat... | 0 |
| 12/22/2020 6:33:57... | G4L-5-10 | WORKGROUP | Rename | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Desktop | explorer.exe | 9164 | Built-in administrat... | 0 |
| 12/22/2020 6:34:34... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Desktop | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:36:06... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume9 | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:40:24... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Desktop | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:40:38... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume9 | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:40:38... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume9 | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:41:42... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Dropbox | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:41:42... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Dropbox | explorer.exe | 9164 | Built-in administrat... | 9125585 |
| 12/22/2020 6:41:51... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx | \Device\HarddiskVolume1\Users\Vito Intaglia\Desktop | explorer.exe | 9164 | Built-in administrat... | 9125585 |

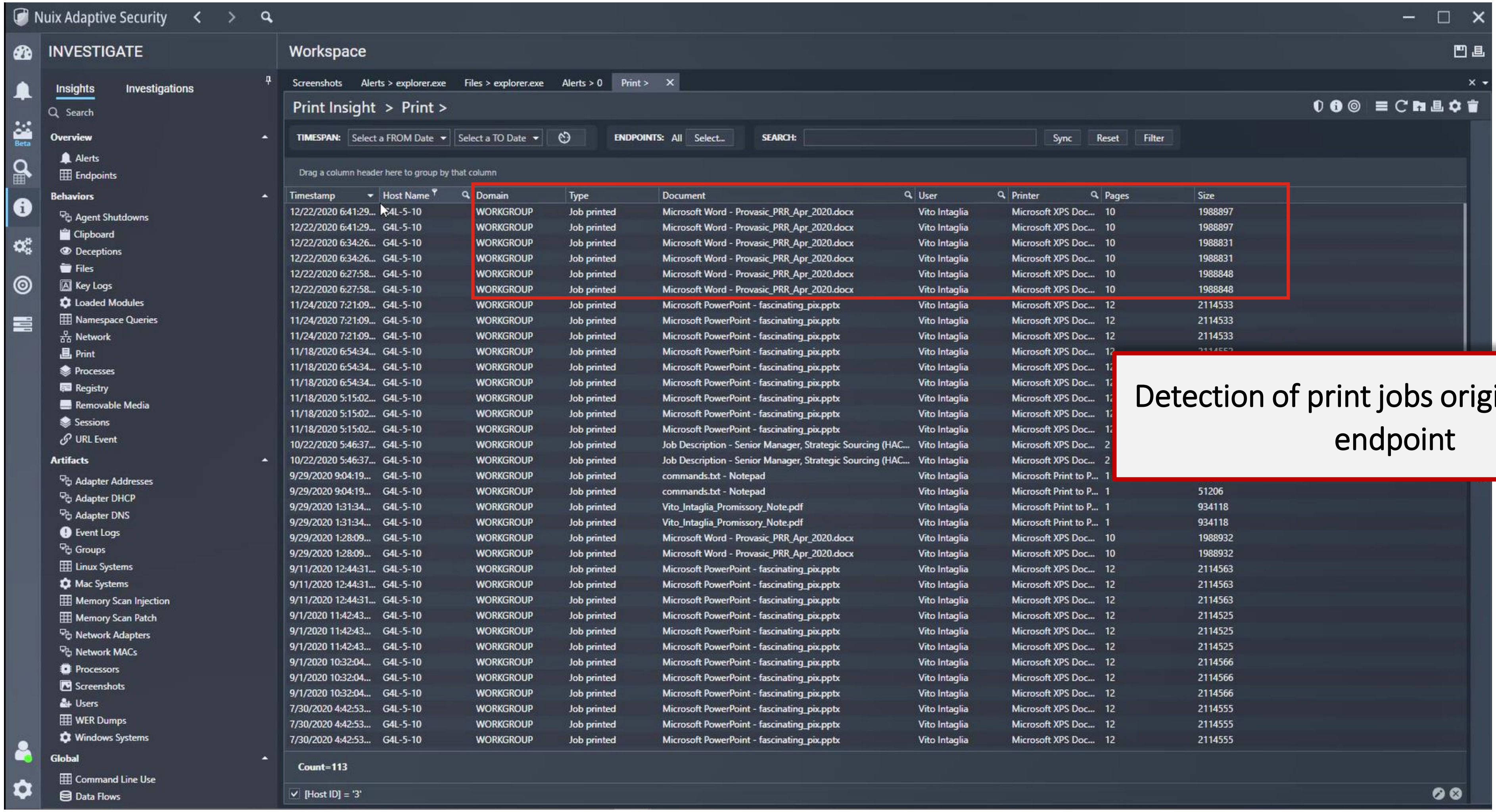
Count=22

☑ [PID] = '9164' And [Host ID] = '3' And [File Name] = 'Provasic_PRR_Apr_2020.docx'

Evidence of files being written to local DropBox folder

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 1 – Data Theft and Disclosure



| Timestamp | Host Name | Domain | Type | Document | User | Printer | Pages | Size |
|---|---|---|---|---|---|---|---|---|
| 12/22/2020 6:41:29... | G4L-5-10 | WORKGROUP | Job printed | Microsoft Word - Provasic_PRR_Apr_2020.docx | Vito Intaglia | Microsoft XPS Doc... | 10 | 1988897 |
| 12/22/2020 6:41:29... | G4L-5-10 | WORKGROUP | Job printed | Microsoft Word - Provasic_PRR_Apr_2020.docx | Vito Intaglia | Microsoft XPS Doc... | 10 | 1988897 |
| 12/22/2020 6:34:26... | G4L-5-10 | WORKGROUP | Job printed | Microsoft Word - Provasic_PRR_Apr_2020.docx | Vito Intaglia | Microsoft XPS Doc... | 10 | 1988831 |
| 12/22/2020 6:34:26... | G4L-5-10 | WORKGROUP | Job printed | Microsoft Word - Provasic_PRR_Apr_2020.docx | Vito Intaglia | Microsoft XPS Doc... | 10 | 1988831 |
| 12/22/2020 6:27:58... | G4L-5-10 | WORKGROUP | Job printed | Microsoft Word - Provasic_PRR_Apr_2020.docx | Vito Intaglia | Microsoft XPS Doc... | 10 | 1988848 |
| 12/22/2020 6:27:58... | G4L-5-10 | WORKGROUP | Job printed | Microsoft Word - Provasic_PRR_Apr_2020.docx | Vito Intaglia | Microsoft XPS Doc... | 10 | 1988848 |
| 11/24/2020 7:21:09... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114533 |
| 11/24/2020 7:21:09... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114533 |
| 11/24/2020 7:21:09... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114533 |
| 11/18/2020 6:54:34... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114553 |
| 11/18/2020 6:54:34... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 1 | |
| 11/18/2020 6:54:34... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 1 | |
| 11/18/2020 5:15:02... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 1 | |
| 11/18/2020 5:15:02... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 1 | |
| 11/18/2020 5:15:02... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 1 | |
| 10/22/2020 5:46:37... | G4L-5-10 | WORKGROUP | Job printed | Job Description - Senior Manager, Strategic Sourcing (HAC... | Vito Intaglia | Microsoft XPS Doc... | 2 | |
| 10/22/2020 5:46:37... | G4L-5-10 | WORKGROUP | Job printed | Job Description - Senior Manager, Strategic Sourcing (HAC... | Vito Intaglia | Microsoft XPS Doc... | 2 | |
| 9/29/2020 9:04:19... | G4L-5-10 | WORKGROUP | Job printed | commands.txt - Notepad | Vito Intaglia | Microsoft Print to P... | 1 | |
| 9/29/2020 9:04:19... | G4L-5-10 | WORKGROUP | Job printed | commands.txt - Notepad | Vito Intaglia | Microsoft Print to P... | 1 | 51206 |
| 9/29/2020 1:31:34... | G4L-5-10 | WORKGROUP | Job printed | Vito_Intaglia_Promissory_Note.pdf | Vito Intaglia | Microsoft Print to P... | 1 | 934118 |
| 9/29/2020 1:31:34... | G4L-5-10 | WORKGROUP | Job printed | Vito_Intaglia_Promissory_Note.pdf | Vito Intaglia | Microsoft Print to P... | 1 | 934118 |
| 9/29/2020 1:28:09... | G4L-5-10 | WORKGROUP | Job printed | Microsoft Word - Provasic_PRR_Apr_2020.docx | Vito Intaglia | Microsoft XPS Doc... | 10 | 1988932 |
| 9/29/2020 1:28:09... | G4L-5-10 | WORKGROUP | Job printed | Microsoft Word - Provasic_PRR_Apr_2020.docx | Vito Intaglia | Microsoft XPS Doc... | 10 | 1988932 |
| 9/11/2020 12:44:31... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114563 |
| 9/11/2020 12:44:31... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114563 |
| 9/11/2020 12:44:31... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114563 |
| 9/1/2020 11:42:43... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114525 |
| 9/1/2020 11:42:43... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114525 |
| 9/1/2020 11:42:43... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114525 |
| 9/1/2020 10:32:04... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114566 |
| 9/1/2020 10:32:04... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114566 |
| 9/1/2020 10:32:04... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114566 |
| 7/30/2020 4:42:53... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114555 |
| 7/30/2020 4:42:53... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114555 |
| 7/30/2020 4:42:53... | G4L-5-10 | WORKGROUP | Job printed | Microsoft PowerPoint - fascinating_pix.pptx | Vito Intaglia | Microsoft XPS Doc... | 12 | 2114555 |

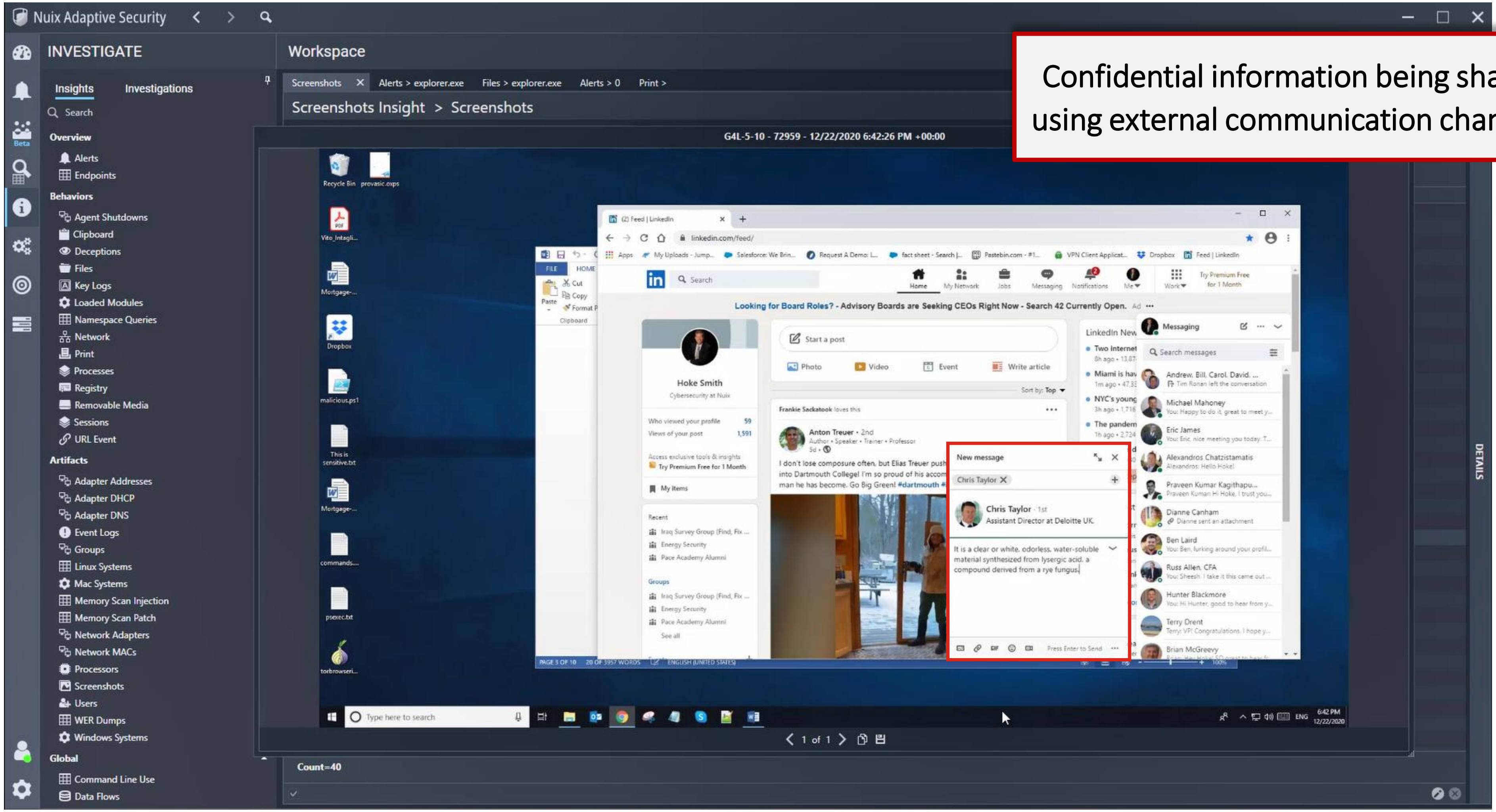
Count=113

☑ [Host ID] = '3'

Detection of print jobs originating from endpoint

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 1 – Data Theft and Disclosure



New message

Chris Taylor

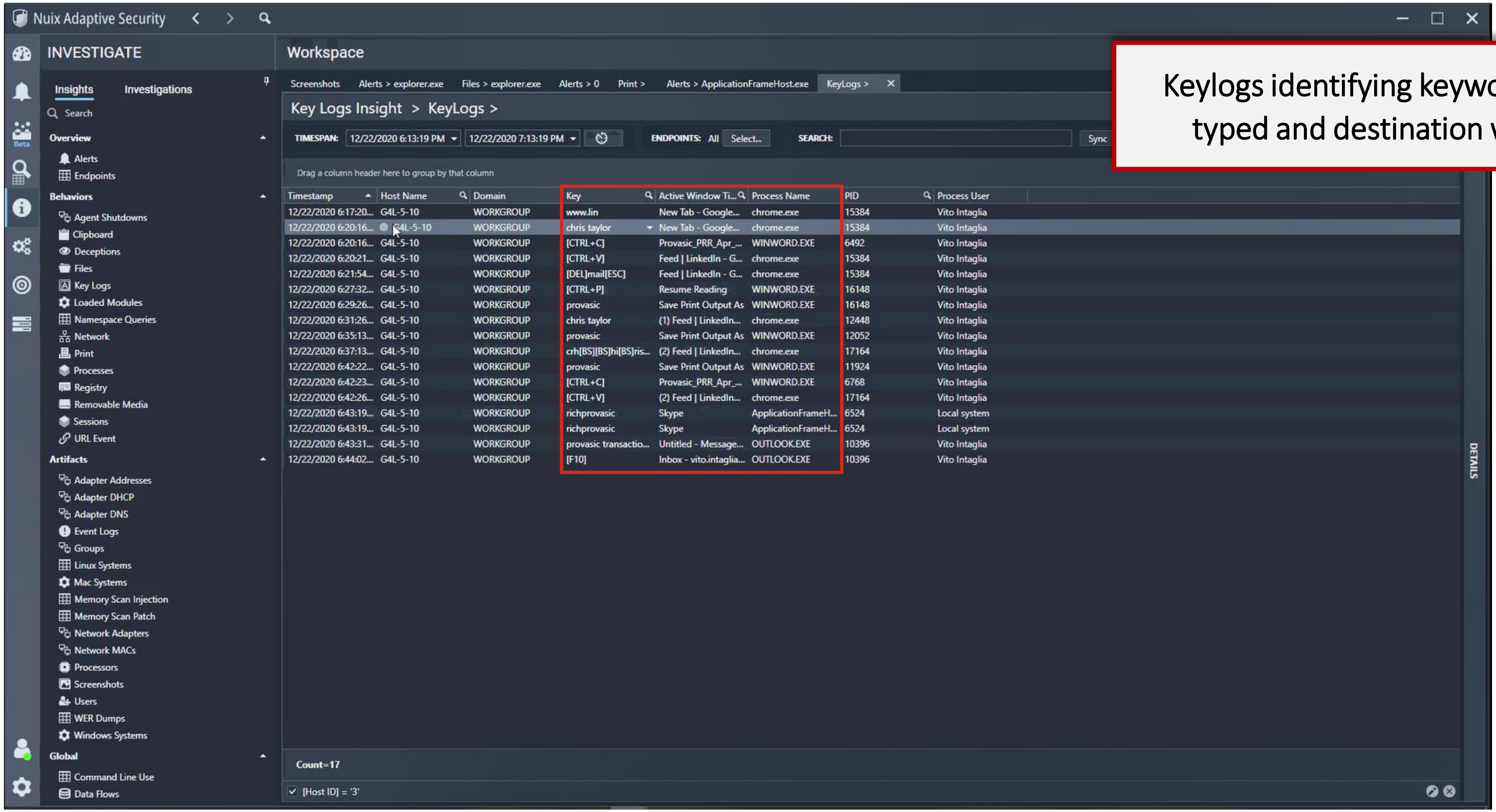
Chris Taylor · 1st
Assistant Director at Deloitte UK

It is a clear or white, odorless, water-soluble material synthesized from lysergic acid, a compound derived from a rye fungus.

Confidential information being shared using external communication channels

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 1 – Data Theft and Disclosure



Key Logs Insight > KeyLogs >

TIMESPAN: 12/22/2020 6:13:19 PM – 12/22/2020 7:13:19 PM   ENDPOINTS: All Select...   SEARCH:

Drag a column header here to group by that column

| Timestamp | Host Name | Domain | Key | Active Window Ti... | Process Name | PID | Process User |
|---|---|---|---|---|---|---|---|
| 12/22/2020 6:17:20... | G4L-5-10 | WORKGROUP | www.lin | New Tab - Google... | chrome.exe | 15384 | Vito Intaglia |
| 12/22/2020 6:20:16... | G4L-5-10 | WORKGROUP | chris taylor | New Tab - Google... | chrome.exe | 15384 | Vito Intaglia |
| 12/22/2020 6:20:16... | G4L-5-10 | WORKGROUP | [CTRL+C] | Provasic_PRR_Apr_... | WINWORD.EXE | 6492 | Vito Intaglia |
| 12/22/2020 6:20:21... | G4L-5-10 | WORKGROUP | [CTRL+V] | Feed \| LinkedIn - G... | chrome.exe | 15384 | Vito Intaglia |
| 12/22/2020 6:21:54... | G4L-5-10 | WORKGROUP | [DEL]mail[ESC] | Feed \| LinkedIn - G... | chrome.exe | 15384 | Vito Intaglia |
| 12/22/2020 6:27:32... | G4L-5-10 | WORKGROUP | [CTRL+P] | Resume Reading | WINWORD.EXE | 16148 | Vito Intaglia |
| 12/22/2020 6:29:26... | G4L-5-10 | WORKGROUP | provasic | Save Print Output As | WINWORD.EXE | 16148 | Vito Intaglia |
| 12/22/2020 6:31:26... | G4L-5-10 | WORKGROUP | chris taylor | (1) Feed \| LinkedIn... | chrome.exe | 12448 | Vito Intaglia |
| 12/22/2020 6:35:13... | G4L-5-10 | WORKGROUP | provasic | Save Print Output As | WINWORD.EXE | 12052 | Vito Intaglia |
| 12/22/2020 6:37:13... | G4L-5-10 | WORKGROUP | crh[BS][BS]hi[BS]ris... | (2) Feed \| LinkedIn... | chrome.exe | 17164 | Vito Intaglia |
| 12/22/2020 6:42:22... | G4L-5-10 | WORKGROUP | provasic | Save Print Output As | WINWORD.EXE | 11924 | Vito Intaglia |
| 12/22/2020 6:42:23... | G4L-5-10 | WORKGROUP | [CTRL+C] | Provasic_PRR_Apr_... | WINWORD.EXE | 6768 | Vito Intaglia |
| 12/22/2020 6:42:26... | G4L-5-10 | WORKGROUP | [CTRL+V] | (2) Feed \| LinkedIn... | chrome.exe | 17164 | Vito Intaglia |
| 12/22/2020 6:43:19... | G4L-5-10 | WORKGROUP | richprovasic | Skype | ApplicationFrameH... | 6524 | Local system |
| 12/22/2020 6:43:19... | G4L-5-10 | WORKGROUP | richprovasic | Skype | ApplicationFrameH... | 6524 | Local system |
| 12/22/2020 6:43:31... | G4L-5-10 | WORKGROUP | provasic transactio... | Untitled - Message... | OUTLOOK.EXE | 10396 | Vito Intaglia |
| 12/22/2020 6:44:02... | G4L-5-10 | WORKGROUP | [F10] | Inbox - vito.intaglia... | OUTLOOK.EXE | 10396 | Vito Intaglia |

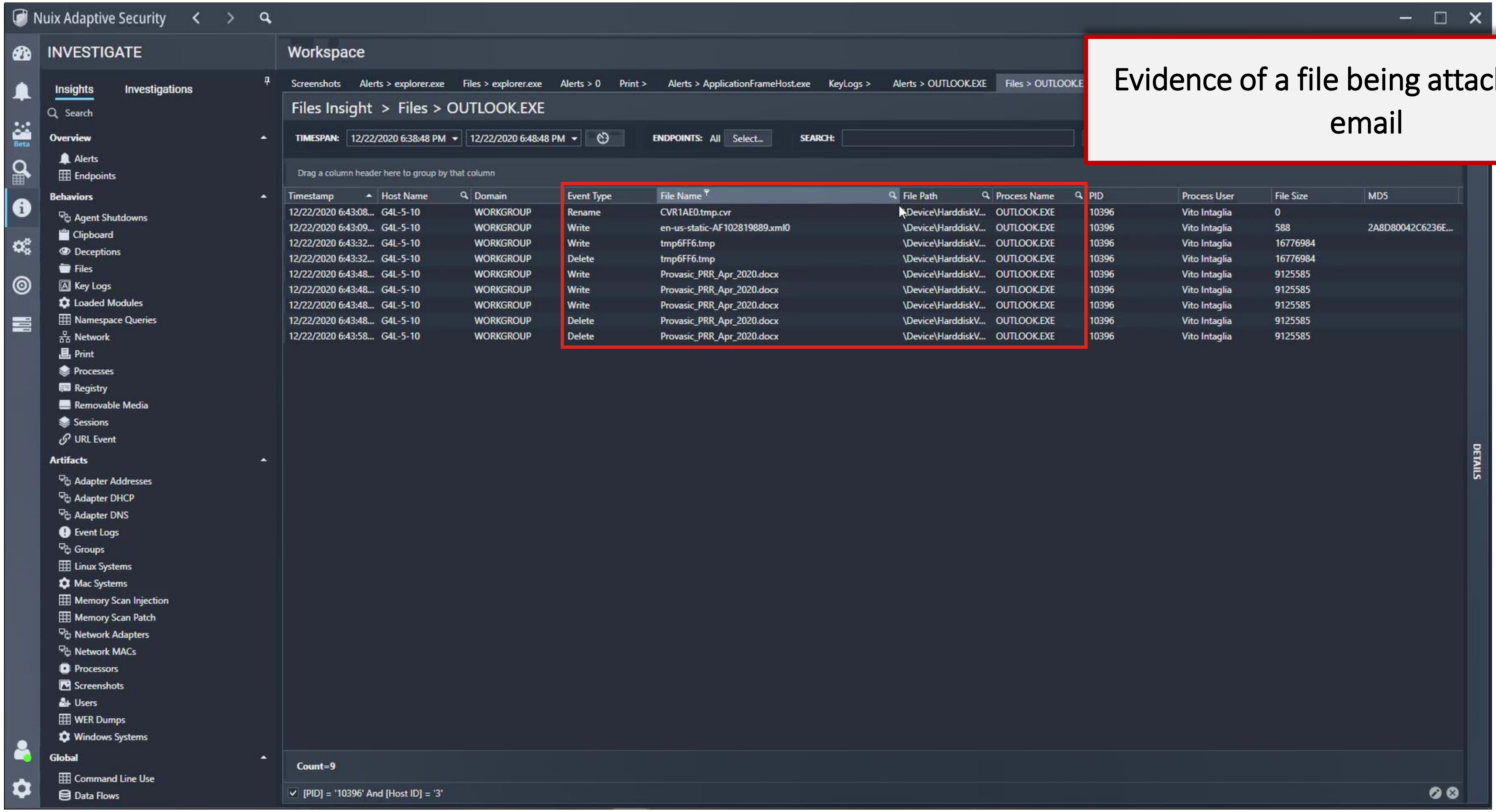
Count=17

☑ [Host ID] = '3'

Keylogs identifying keywords being typed and destination window

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 1 – Data Theft and Disclosure



Files Insight > Files > OUTLOOK.EXE

TIMESPAN: 12/22/2020 6:38:48 PM – 12/22/2020 6:48:48 PM  ENDPOINTS: All Select...  SEARCH:

Drag a column header here to group by that column

| Timestamp | Host Name | Domain | Event Type | File Name | File Path | Process Name | PID | Process User | File Size | MD5 |
|---|---|---|---|---|---|---|---|---|---|---|
| 12/22/2020 6:43:08... | G4L-5-10 | WORKGROUP | Rename | CVR1AE0.tmp.cvr | \Device\HarddiskV... | OUTLOOK.EXE | 10396 | Vito Intaglia | 0 | |
| 12/22/2020 6:43:09... | G4L-5-10 | WORKGROUP | Write | en-us-static-AF102819889.xml0 | \Device\HarddiskV... | OUTLOOK.EXE | 10396 | Vito Intaglia | 588 | 2A8D80042C6236E... |
| 12/22/2020 6:43:32... | G4L-5-10 | WORKGROUP | Write | tmp6FF6.tmp | \Device\HarddiskV... | OUTLOOK.EXE | 10396 | Vito Intaglia | 16776984 | |
| 12/22/2020 6:43:32... | G4L-5-10 | WORKGROUP | Delete | tmp6FF6.tmp | \Device\HarddiskV... | OUTLOOK.EXE | 10396 | Vito Intaglia | 16776984 | |
| 12/22/2020 6:43:48... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | OUTLOOK.EXE | 10396 | Vito Intaglia | 9125585 | |
| 12/22/2020 6:43:48... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | OUTLOOK.EXE | 10396 | Vito Intaglia | 9125585 | |
| 12/22/2020 6:43:48... | G4L-5-10 | WORKGROUP | Write | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | OUTLOOK.EXE | 10396 | Vito Intaglia | 9125585 | |
| 12/22/2020 6:43:48... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | OUTLOOK.EXE | 10396 | Vito Intaglia | 9125585 | |
| 12/22/2020 6:43:58... | G4L-5-10 | WORKGROUP | Delete | Provasic_PRR_Apr_2020.docx | \Device\HarddiskV... | OUTLOOK.EXE | 10396 | Vito Intaglia | 9125585 | |

Count=9

☑ [PID] = '10396' And [Host ID] = '3'

Evidence of a file being attached to an email

# Scenario 2 - Fraudulent Transaction

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 2 – Fraudulent Transaction

### Falsify a purchase order

### Prepare

- Research target company
- Get tools to clean up evidence
- Set up secure communications

### Execute

- Copy template to local system
- Modify template
- Falsify signature
- Print document

### Cleanup

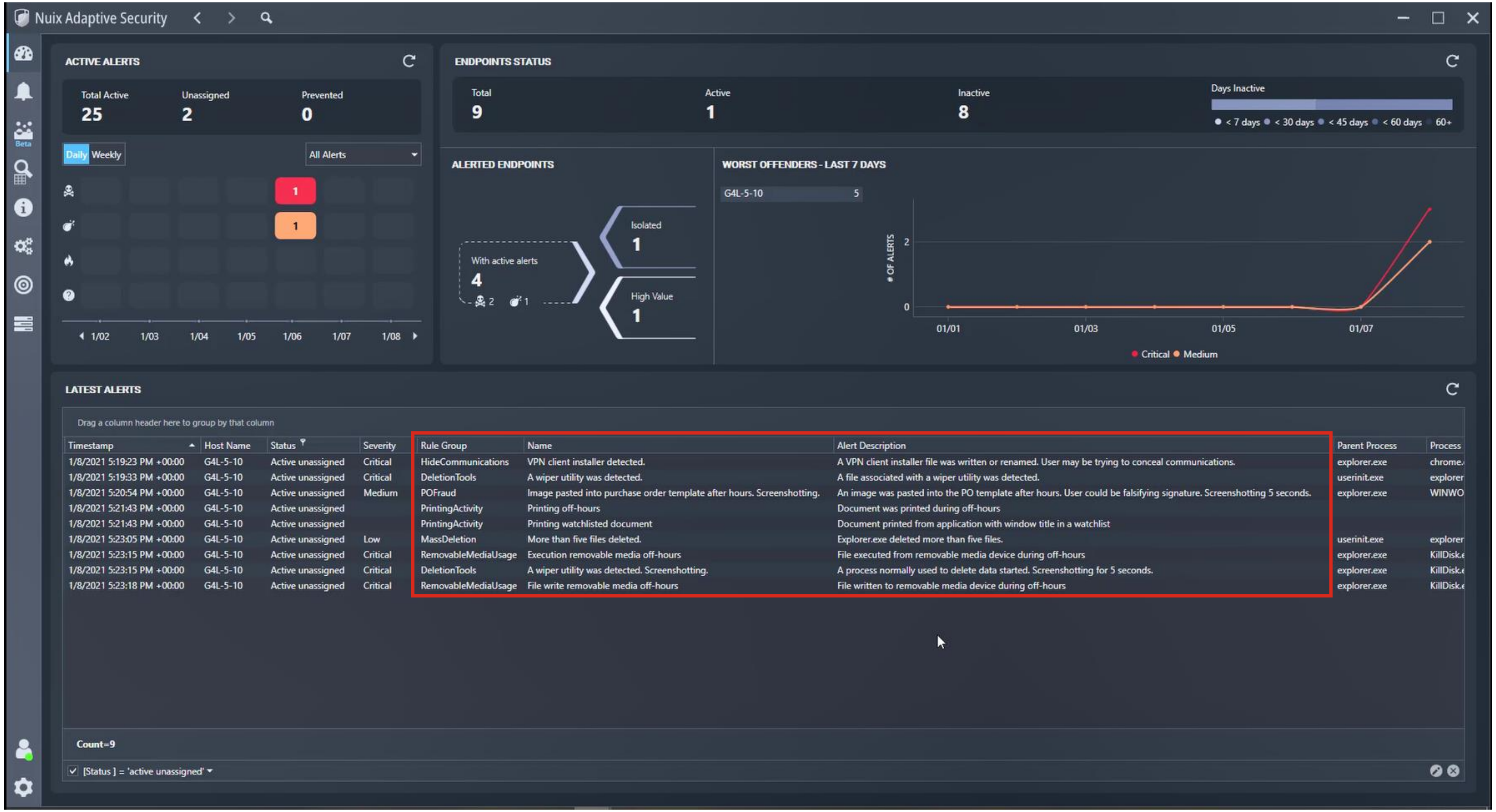
- Delete files
- Run a deletion utility

### Communicate

- Interact with other involved parties over chat, email, etc.

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 2 – Fraudulent Transaction



ACTIVE ALERTS

Total Active 25
Unassigned 2
Prevented 0

ENDPOINTS STATUS

Total 9
Active 1
Inactive 8

ALERTED ENDPOINTS

With active alerts 4
2 1
Isolated 1
High Value 1

LATEST ALERTS

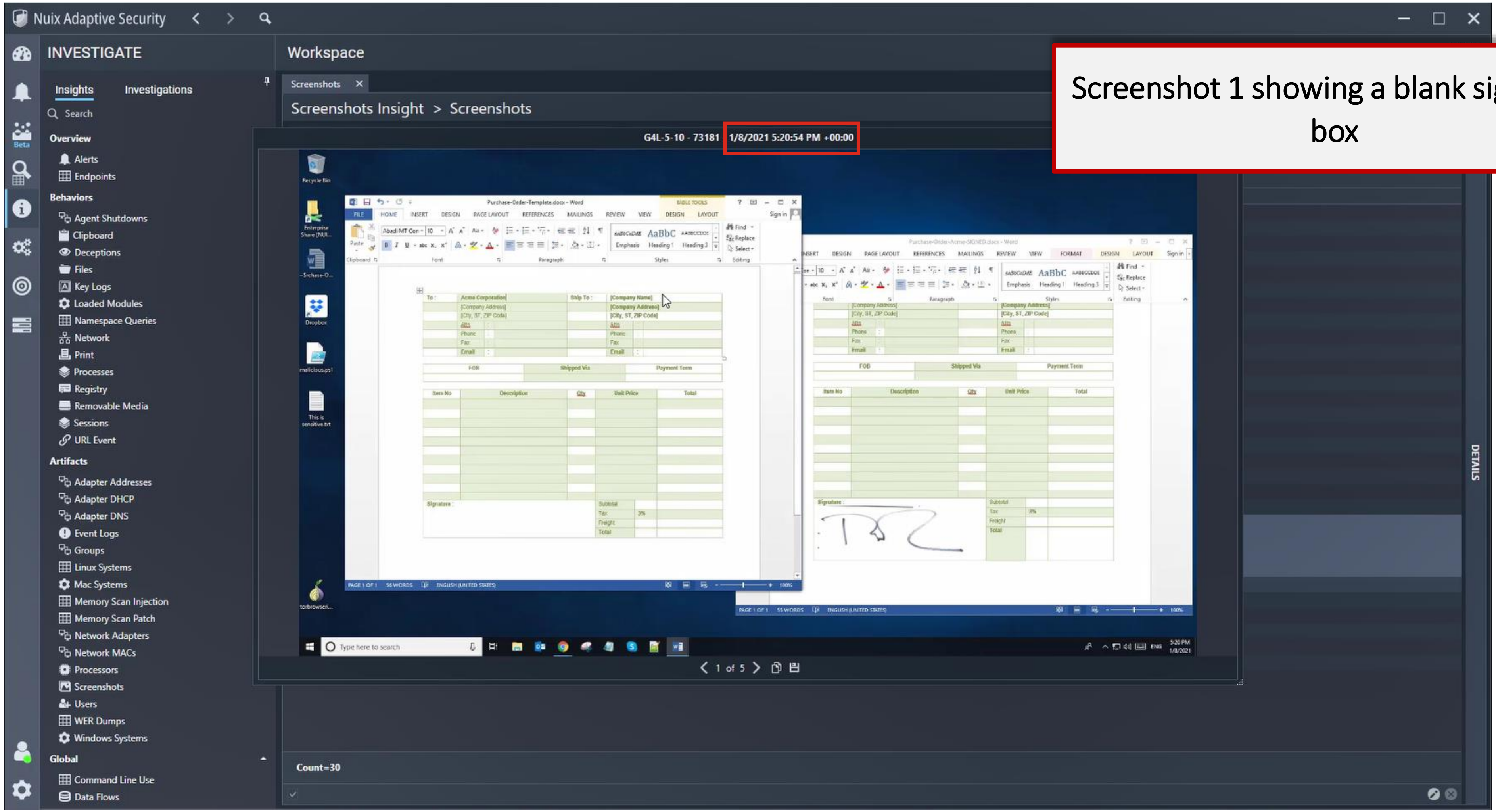
| Timestamp | Host Name | Status | Severity | Rule Group | Name | Alert Description | Parent Process | Process |
|---|---|---|---|---|---|---|---|---|
| 1/8/2021 5:19:23 PM +00:00 | G4L-5-10 | Active unassigned | Critical | HideCommunications | VPN client installer detected. | A VPN client installer file was written or renamed. User may be trying to conceal communications. | explorer.exe | chrome. |
| 1/8/2021 5:19:33 PM +00:00 | G4L-5-10 | Active unassigned | Critical | DeletionTools | A wiper utility was detected. | A file associated with a wiper utility was detected. | userinit.exe | explorer |
| 1/8/2021 5:20:54 PM +00:00 | G4L-5-10 | Active unassigned | Medium | POFraud | Image pasted into purchase order template after hours. Screenshotting. | An image was pasted into the PO template after hours. User could be falsifying signature. Screenshotting 5 seconds. | explorer.exe | WINWO |
| 1/8/2021 5:21:43 PM +00:00 | G4L-5-10 | Active unassigned | | PrintingActivity | Printing off-hours | Document was printed during off-hours | | |
| 1/8/2021 5:21:43 PM +00:00 | G4L-5-10 | Active unassigned | | PrintingActivity | Printing watchlisted document | Document printed from application with window title in a watchlist | | |
| 1/8/2021 5:23:05 PM +00:00 | G4L-5-10 | Active unassigned | Low | MassDeletion | More than five files deleted. | Explorer.exe deleted more than five files. | userinit.exe | explorer |
| 1/8/2021 5:23:15 PM +00:00 | G4L-5-10 | Active unassigned | Critical | RemovableMediaUsage | Execution removable media off-hours | File executed from removable media device during off-hours | explorer.exe | KillDisk. |
| 1/8/2021 5:23:15 PM +00:00 | G4L-5-10 | Active unassigned | Critical | DeletionTools | A wiper utility was detected. Screenshotting. | A process normally used to delete data started. Screenshotting for 5 seconds. | explorer.exe | KillDisk. |
| 1/8/2021 5:23:18 PM +00:00 | G4L-5-10 | Active unassigned | Critical | RemovableMediaUsage | File write removable media off-hours | File written to removable media device during off-hours | explorer.exe | KillDisk. |

Count=9

☑ [Status ] = 'active unassigned'

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

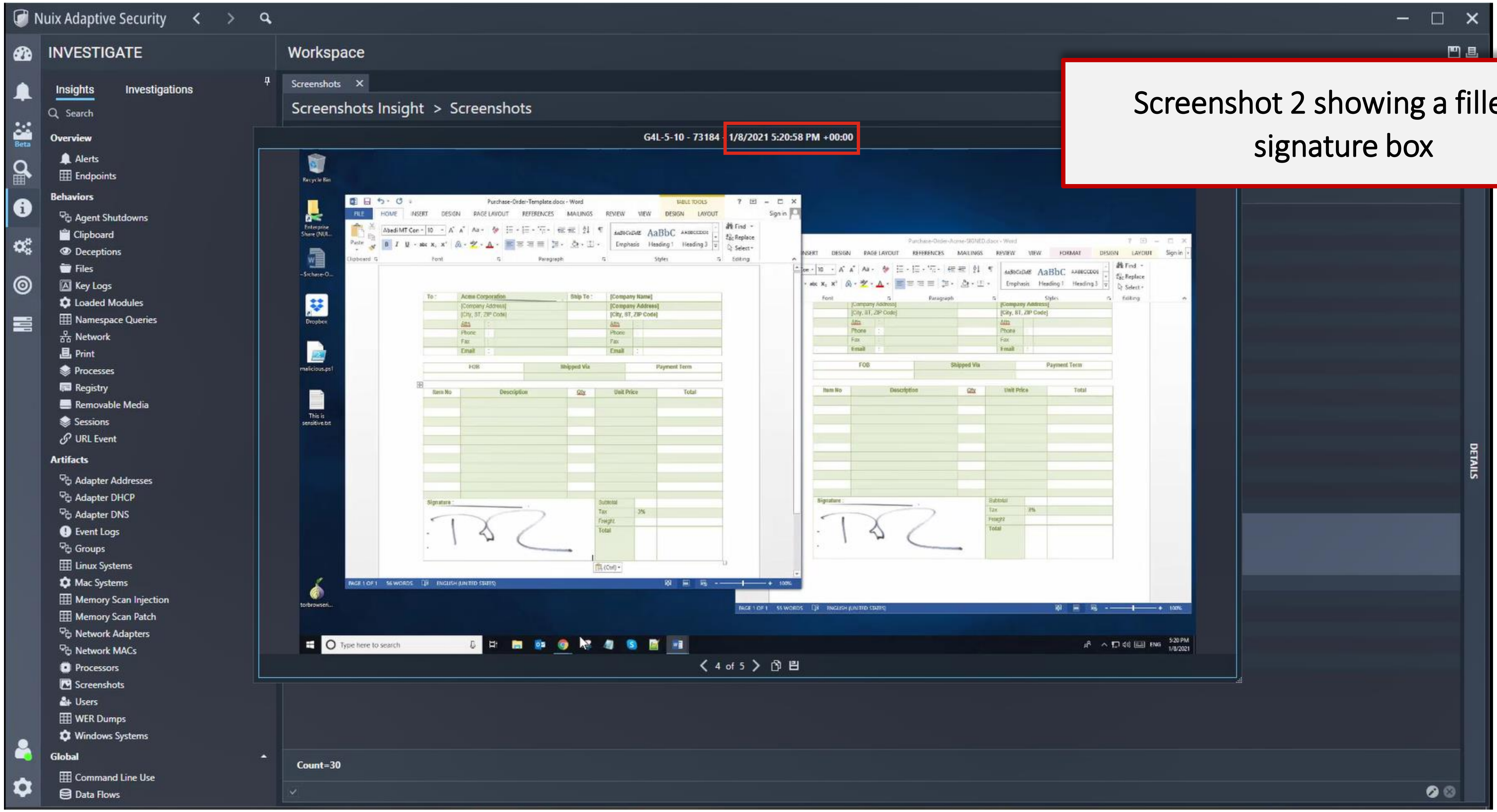
## Scenario 2 – Fraudulent Transaction



Screenshot 1 showing a blank signature box

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

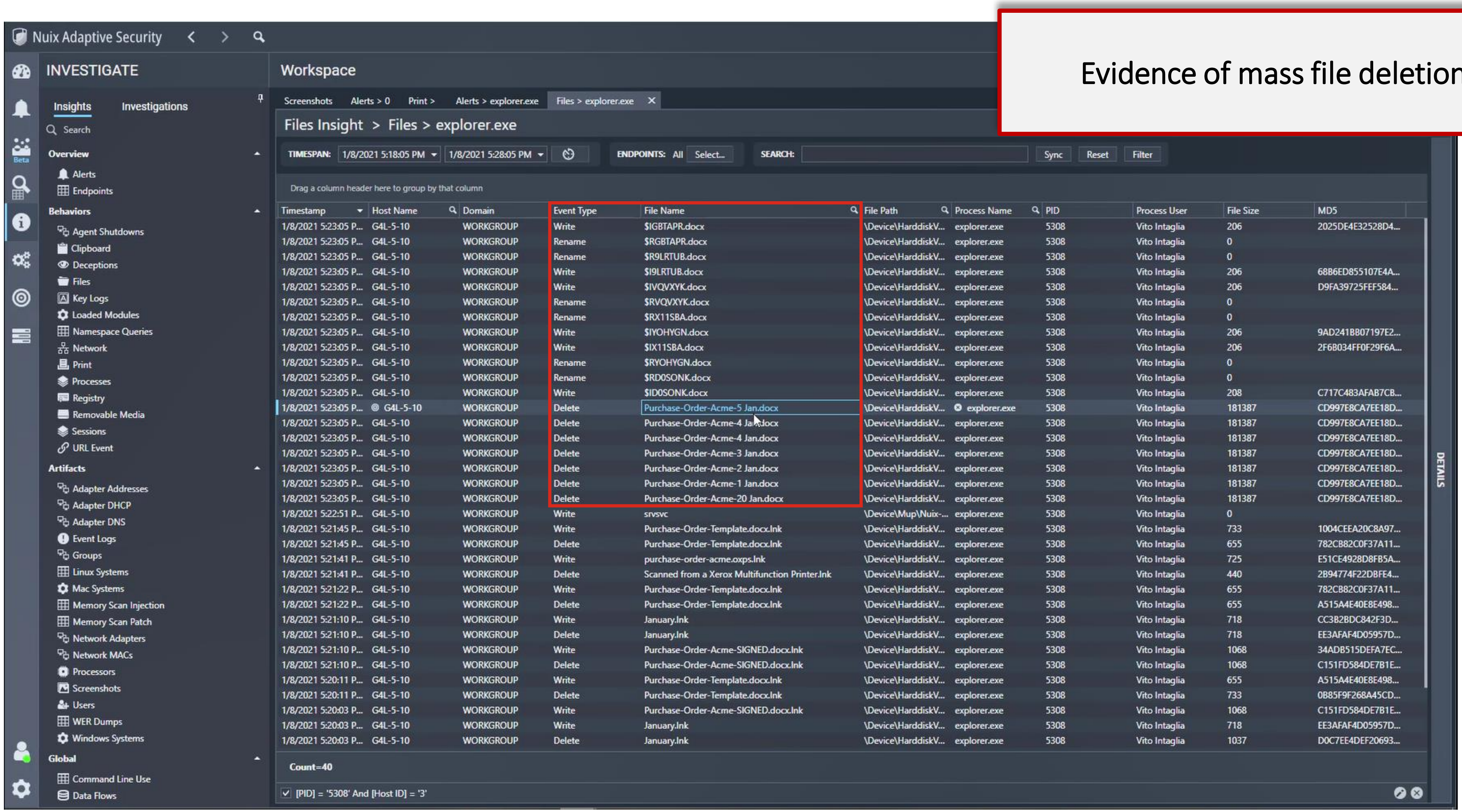
## Scenario 2 – Fraudulent Transaction



Screenshot 2 showing a filled in signature box

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 2 – Fraudulent Transaction



TIMESPAN: 1/8/2021 5:18:05 PM – 1/8/2021 5:28:05 PM ENDPOINTS: All Select... SEARCH:

Drag a column header here to group by that column

| Timestamp | Host Name | Domain | Event Type | File Name | File Path | Process Name | PID | Process User | File Size | MD5 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Write | $IGBTAPR.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 206 | 2025DE4E32528D4... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Rename | $RGBTAPR.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 0 | |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Rename | $R9LRTUB.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 0 | |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Write | $I9LRTUB.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 206 | 68B6ED855107E4A... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Write | $IVQVXYK.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 206 | D9FA39725FEF584... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Rename | $RVQVXYK.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 0 | |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Rename | $RX11SBA.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 0 | |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Write | $IYOHYGN.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 206 | 9AD241BB07197E2... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Write | $IX11SBA.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 206 | 2F6B034FF0F29F6A... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Rename | $RYOHYGN.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 0 | |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Rename | $RD0SONK.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 0 | |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Write | $ID0SONK.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 208 | C717C483AFAB7CB... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Acme-5 Jan.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 181387 | CD997E8CA7EE18D... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Acme-4 Jan.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 181387 | CD997E8CA7EE18D... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Acme-4 Jan.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 181387 | CD997E8CA7EE18D... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Acme-3 Jan.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 181387 | CD997E8CA7EE18D... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Acme-2 Jan.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 181387 | CD997E8CA7EE18D... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Acme-1 Jan.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 181387 | CD997E8CA7EE18D... |
| 1/8/2021 5:23:05 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Acme-20 Jan.docx | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 181387 | CD997E8CA7EE18D... |
| 1/8/2021 5:22:51 P... | G4L-5-10 | WORKGROUP | Write | srvsvc | \Device\Mup\Nuix-... | explorer.exe | 5308 | Vito Intaglia | 0 | |
| 1/8/2021 5:21:45 P... | G4L-5-10 | WORKGROUP | Write | Purchase-Order-Template.docx.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 733 | 1004CEEA20C8A97... |
| 1/8/2021 5:21:45 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Template.docx.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 655 | 782CB82C0F37A11... |
| 1/8/2021 5:21:41 P... | G4L-5-10 | WORKGROUP | Write | purchase-order-acme.oxps.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 725 | E51CE4928D8FB5A... |
| 1/8/2021 5:21:41 P... | G4L-5-10 | WORKGROUP | Delete | Scanned from a Xerox Multifunction Printer.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 440 | 2B94774F22DBFE4... |
| 1/8/2021 5:21:22 P... | G4L-5-10 | WORKGROUP | Write | Purchase-Order-Template.docx.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 655 | 782CB82C0F37A11... |
| 1/8/2021 5:21:22 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Template.docx.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 655 | A515A4E40E8E498... |
| 1/8/2021 5:21:10 P... | G4L-5-10 | WORKGROUP | Write | January.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 718 | CC3B2BDC842F3D... |
| 1/8/2021 5:21:10 P... | G4L-5-10 | WORKGROUP | Delete | January.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 718 | EE3AFAF4D05957D... |
| 1/8/2021 5:21:10 P... | G4L-5-10 | WORKGROUP | Write | Purchase-Order-Acme-SIGNED.docx.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 1068 | 34ADB515DEFA7EC... |
| 1/8/2021 5:21:10 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Acme-SIGNED.docx.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 1068 | C151FD584DE7B1E... |
| 1/8/2021 5:20:11 P... | G4L-5-10 | WORKGROUP | Write | Purchase-Order-Template.docx.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 655 | A515A4E40E8E498... |
| 1/8/2021 5:20:11 P... | G4L-5-10 | WORKGROUP | Delete | Purchase-Order-Template.docx.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 733 | 0B85F9F268A45CD... |
| 1/8/2021 5:20:03 P... | G4L-5-10 | WORKGROUP | Write | Purchase-Order-Acme-SIGNED.docx.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 1068 | C151FD584DE7B1E... |
| 1/8/2021 5:20:03 P... | G4L-5-10 | WORKGROUP | Write | January.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 718 | EE3AFAF4D05957D... |
| 1/8/2021 5:20:03 P... | G4L-5-10 | WORKGROUP | Delete | January.lnk | \Device\HarddiskV... | explorer.exe | 5308 | Vito Intaglia | 1037 | D0C7EE4DEF20693... |

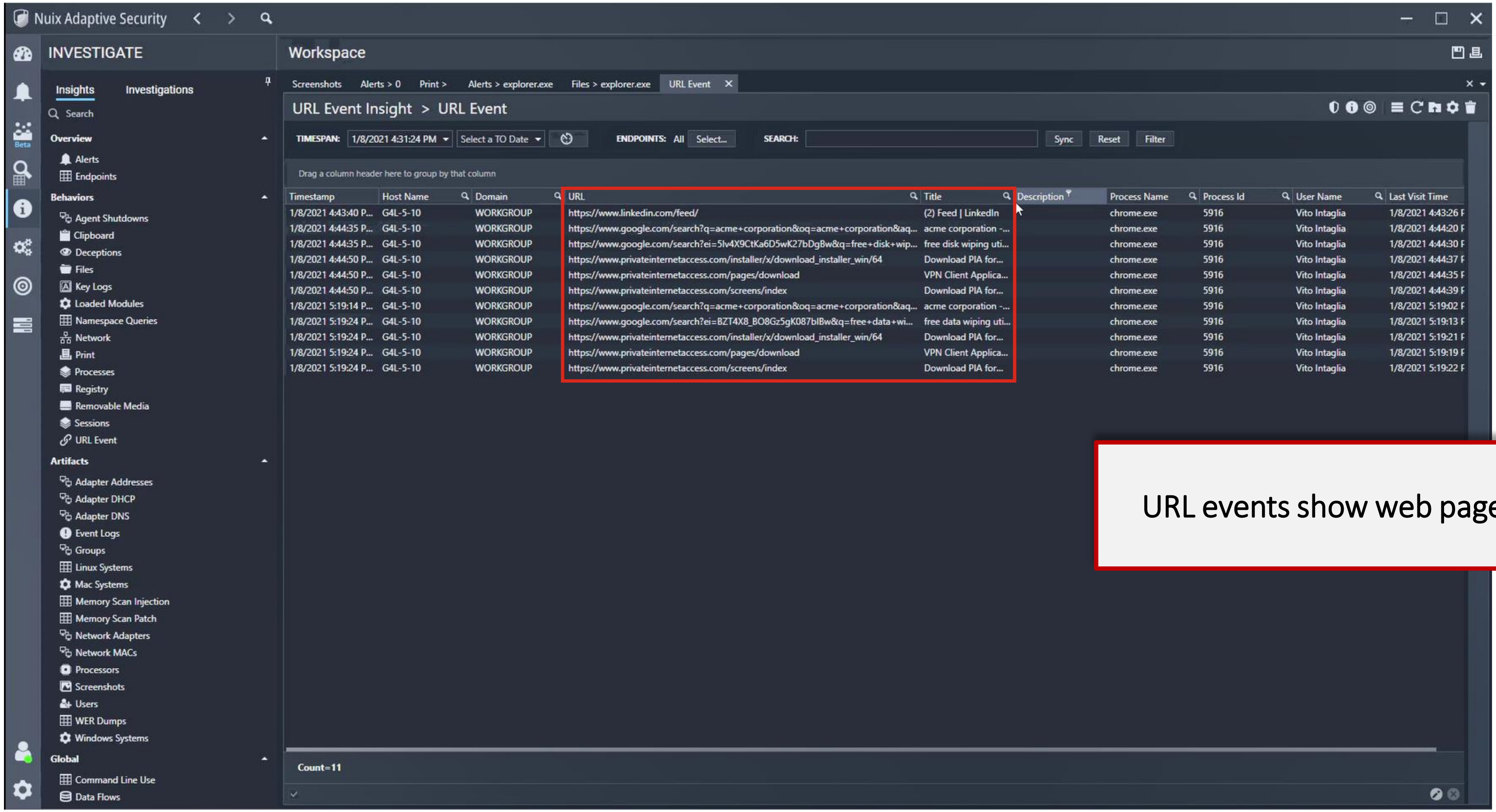
Count=40

☑ [PID] = '5308' And [Host ID] = '3'

Evidence of mass file deletion

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 2 – Fraudulent Transaction



URL Event Insight > URL Event

TIMESPAN: 1/8/2021 4:31:24 PM | Select a TO Date | ENDPOINTS: All | SEARCH:

Drag a column header here to group by that column

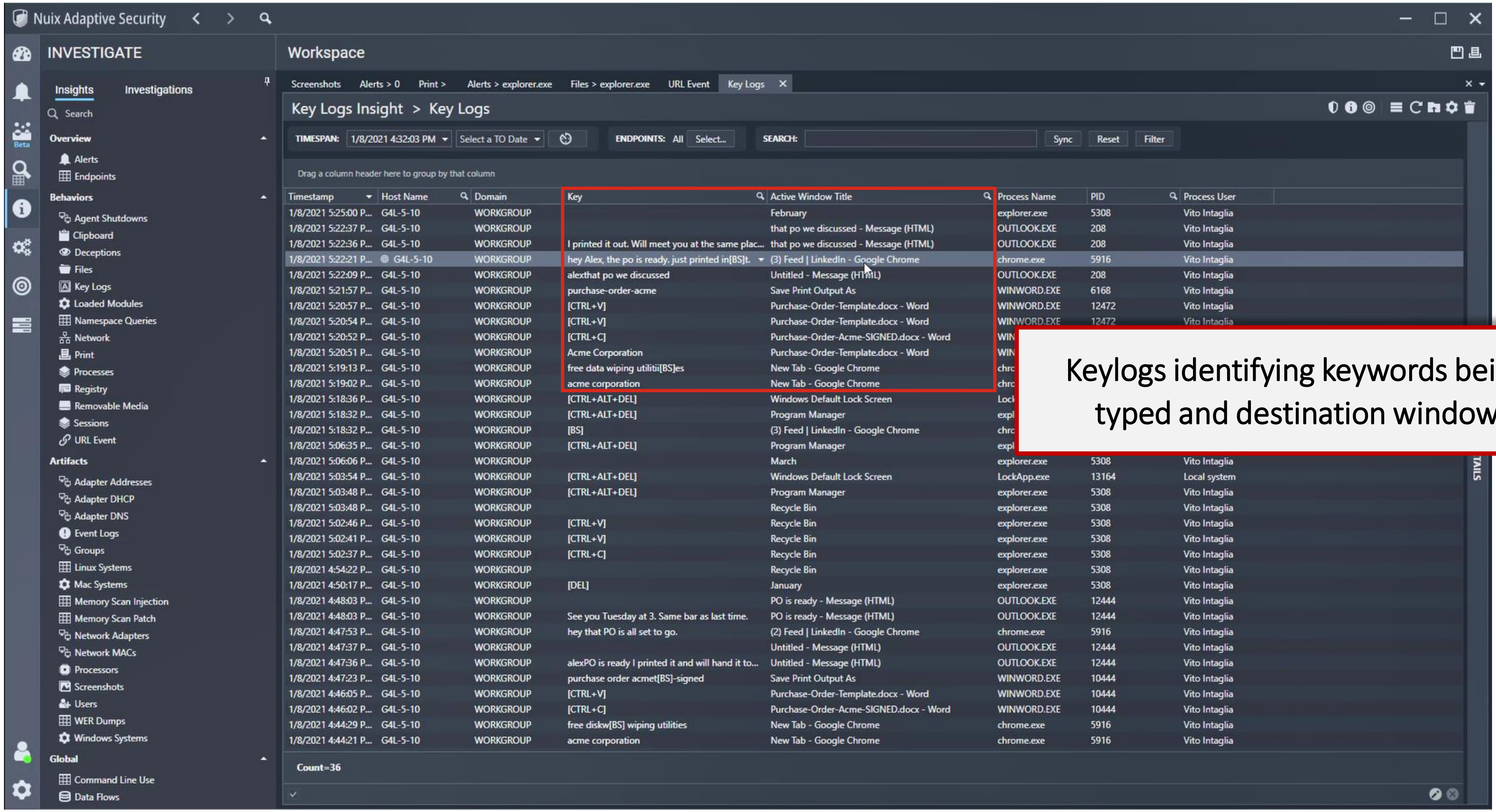
| Timestamp | Host Name | Domain | URL | Title | Description | Process Name | Process Id | User Name | Last Visit Time |
|---|---|---|---|---|---|---|---|---|---|
| 1/8/2021 4:43:40 P... | G4L-5-10 | WORKGROUP | https://www.linkedin.com/feed/ | (2) Feed \| LinkedIn |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 4:43:26 |
| 1/8/2021 4:44:35 P... | G4L-5-10 | WORKGROUP | https://www.google.com/search?q=acme+corporation&oq=acme+corporation&aq... | acme corporation -... |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 4:44:20 |
| 1/8/2021 4:44:35 P... | G4L-5-10 | WORKGROUP | https://www.google.com/search?ei=5lv4X9CtKa6D5wK27bDgBw&q=free+disk+wip... | free disk wiping uti... |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 4:44:30 |
| 1/8/2021 4:44:50 P... | G4L-5-10 | WORKGROUP | https://www.privateinternetaccess.com/installer/x/download_installer_win/64 | Download PIA for... |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 4:44:37 |
| 1/8/2021 4:44:50 P... | G4L-5-10 | WORKGROUP | https://www.privateinternetaccess.com/pages/download | VPN Client Applica... |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 4:44:35 |
| 1/8/2021 4:44:50 P... | G4L-5-10 | WORKGROUP | https://www.privateinternetaccess.com/screens/index | Download PIA for... |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 4:44:39 |
| 1/8/2021 5:19:14 P... | G4L-5-10 | WORKGROUP | https://www.google.com/search?q=acme+corporation&oq=acme+corporation&aq... | acme corporation -... |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 5:19:02 |
| 1/8/2021 5:19:24 P... | G4L-5-10 | WORKGROUP | https://www.google.com/search?ei=BZT4X8_BO8Gz5gK087bIBw&q=free+data+wi... | free data wiping uti... |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 5:19:13 |
| 1/8/2021 5:19:24 P... | G4L-5-10 | WORKGROUP | https://www.privateinternetaccess.com/installer/x/download_installer_win/64 | Download PIA for... |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 5:19:21 |
| 1/8/2021 5:19:24 P... | G4L-5-10 | WORKGROUP | https://www.privateinternetaccess.com/pages/download | VPN Client Applica... |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 5:19:19 |
| 1/8/2021 5:19:24 P... | G4L-5-10 | WORKGROUP | https://www.privateinternetaccess.com/screens/index | Download PIA for... |  | chrome.exe | 5916 | Vito Intaglia | 1/8/2021 5:19:22 |

Count=11

URL events show web pages visited

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Scenario 2 – Fraudulent Transaction



TIMESPAN: 1/8/2021 4:32:03 PM   Select a TO Date   ENDPOINTS: All   Select...   SEARCH:

| Timestamp | Host Name | Domain | Key | Active Window Title | Process Name | PID | Process User |
|---|---|---|---|---|---|---|---|
| 1/8/2021 5:25:00 P... | G4L-5-10 | WORKGROUP |  | February | explorer.exe | 5308 | Vito Intaglia |
| 1/8/2021 5:22:37 P... | G4L-5-10 | WORKGROUP |  | that po we discussed - Message (HTML) | OUTLOOK.EXE | 208 | Vito Intaglia |
| 1/8/2021 5:22:36 P... | G4L-5-10 | WORKGROUP | I printed it out. Will meet you at the same plac... | that po we discussed - Message (HTML) | OUTLOOK.EXE | 208 | Vito Intaglia |
| 1/8/2021 5:22:21 P... | G4L-5-10 | WORKGROUP | hey Alex, the po is ready. just printed in[BS]t. | (3) Feed \| LinkedIn - Google Chrome | chrome.exe | 5916 | Vito Intaglia |
| 1/8/2021 5:22:09 P... | G4L-5-10 | WORKGROUP | alexthat po we discussed | Untitled - Message (HTML) | OUTLOOK.EXE | 208 | Vito Intaglia |
| 1/8/2021 5:21:57 P... | G4L-5-10 | WORKGROUP | purchase-order-acme | Save Print Output As | WINWORD.EXE | 6168 | Vito Intaglia |
| 1/8/2021 5:20:57 P... | G4L-5-10 | WORKGROUP | [CTRL+V] | Purchase-Order-Template.docx - Word | WINWORD.EXE | 12472 | Vito Intaglia |
| 1/8/2021 5:20:54 P... | G4L-5-10 | WORKGROUP | [CTRL+V] | Purchase-Order-Template.docx - Word | WINWORD.EXE | 12472 | Vito Intaglia |
| 1/8/2021 5:20:52 P... | G4L-5-10 | WORKGROUP | [CTRL+C] | Purchase-Order-Acme-SIGNED.docx - Word | WIN |  |  |
| 1/8/2021 5:20:51 P... | G4L-5-10 | WORKGROUP | Acme Corporation | Purchase-Order-Template.docx - Word | WIN |  |  |
| 1/8/2021 5:19:13 P... | G4L-5-10 | WORKGROUP | free data wiping utilitii[BS]es | New Tab - Google Chrome | chrc |  |  |
| 1/8/2021 5:19:02 P... | G4L-5-10 | WORKGROUP | acme corporation | New Tab - Google Chrome | chrc |  |  |
| 1/8/2021 5:18:36 P... | G4L-5-10 | WORKGROUP | [CTRL+ALT+DEL] | Windows Default Lock Screen | Lock |  |  |
| 1/8/2021 5:18:32 P... | G4L-5-10 | WORKGROUP | [CTRL+ALT+DEL] | Program Manager | expl |  |  |
| 1/8/2021 5:18:32 P... | G4L-5-10 | WORKGROUP | [BS] | (3) Feed \| LinkedIn - Google Chrome | chrc |  |  |
| 1/8/2021 5:06:35 P... | G4L-5-10 | WORKGROUP | [CTRL+ALT+DEL] | Program Manager | expl |  |  |
| 1/8/2021 5:06:06 P... | G4L-5-10 | WORKGROUP |  | March | explorer.exe | 5308 | Vito Intaglia |
| 1/8/2021 5:03:54 P... | G4L-5-10 | WORKGROUP | [CTRL+ALT+DEL] | Windows Default Lock Screen | LockApp.exe | 13164 | Local system |
| 1/8/2021 5:03:48 P... | G4L-5-10 | WORKGROUP | [CTRL+ALT+DEL] | Program Manager | explorer.exe | 5308 | Vito Intaglia |
| 1/8/2021 5:03:48 P... | G4L-5-10 | WORKGROUP |  | Recycle Bin | explorer.exe | 5308 | Vito Intaglia |
| 1/8/2021 5:02:46 P... | G4L-5-10 | WORKGROUP | [CTRL+V] | Recycle Bin | explorer.exe | 5308 | Vito Intaglia |
| 1/8/2021 5:02:41 P... | G4L-5-10 | WORKGROUP | [CTRL+V] | Recycle Bin | explorer.exe | 5308 | Vito Intaglia |
| 1/8/2021 5:02:37 P... | G4L-5-10 | WORKGROUP | [CTRL+C] | Recycle Bin | explorer.exe | 5308 | Vito Intaglia |
| 1/8/2021 4:54:22 P... | G4L-5-10 | WORKGROUP |  | Recycle Bin | explorer.exe | 5308 | Vito Intaglia |
| 1/8/2021 4:50:17 P... | G4L-5-10 | WORKGROUP | [DEL] | January | explorer.exe | 5308 | Vito Intaglia |
| 1/8/2021 4:48:03 P... | G4L-5-10 | WORKGROUP |  | PO is ready - Message (HTML) | OUTLOOK.EXE | 12444 | Vito Intaglia |
| 1/8/2021 4:48:03 P... | G4L-5-10 | WORKGROUP | See you Tuesday at 3. Same bar as last time. | PO is ready - Message (HTML) | OUTLOOK.EXE | 12444 | Vito Intaglia |
| 1/8/2021 4:47:53 P... | G4L-5-10 | WORKGROUP | hey that PO is all set to go. | (2) Feed \| LinkedIn - Google Chrome | chrome.exe | 5916 | Vito Intaglia |
| 1/8/2021 4:47:37 P... | G4L-5-10 | WORKGROUP |  | Untitled - Message (HTML) | OUTLOOK.EXE | 12444 | Vito Intaglia |
| 1/8/2021 4:47:36 P... | G4L-5-10 | WORKGROUP | alexPO is ready I printed it and will hand it to... | Untitled - Message (HTML) | OUTLOOK.EXE | 12444 | Vito Intaglia |
| 1/8/2021 4:47:23 P... | G4L-5-10 | WORKGROUP | purchase order acmet[BS]-signed | Save Print Output As | WINWORD.EXE | 10444 | Vito Intaglia |
| 1/8/2021 4:46:05 P... | G4L-5-10 | WORKGROUP | [CTRL+V] | Purchase-Order-Template.docx - Word | WINWORD.EXE | 10444 | Vito Intaglia |
| 1/8/2021 4:46:02 P... | G4L-5-10 | WORKGROUP | [CTRL+C] | Purchase-Order-Acme-SIGNED.docx - Word | WINWORD.EXE | 10444 | Vito Intaglia |
| 1/8/2021 4:44:29 P... | G4L-5-10 | WORKGROUP | free diskw[BS] wiping utilities | New Tab - Google Chrome | chrome.exe | 5916 | Vito Intaglia |
| 1/8/2021 4:44:21 P... | G4L-5-10 | WORKGROUP | acme corporation | New Tab - Google Chrome | chrome.exe | 5916 | Vito Intaglia |

Count=36

Keylogs identifying keywords being typed and destination window

# Summary and questions

# It's what's inside that counts: transforming investigations to detect and prevent insider threats

## Summary and questions

**See what the user sees**
Capture screenshots of key activities

**Live preview a computer remotely**
Collect targeted data in moments without disrupting the end-user

**Capture document activity**
File writes, document manipulations and deletions, plus printed activity.

**Capture advanced data loss indicators**
Identify transmittal of confidential materials into unmonitored channels

**Adapt on the fly**
Craft bespoke rules for new and unfolding situations to gain investigative insights

**Capture what the user is typing**
Targeted captures of text for alerting or lookback purposes

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

## Summary and questions

With this approach and solution, you benefit from:

- **Quickly identify anomalous behaviour** through evidence such as keypresses, files printed and screenshots, that cover user behaviours.

- **Mitigate financial loss, reputational damage and regulatory scrutiny** by being proactively alerted to issues and events as they happen rather than retrospectively.

- **Adapt the solution as your risk profile changes** by tailor alerts for different jurisdictions, business units and functions.

- **Enable digital forensic collections** of key evidence remotely, covertly and before it is inadvertently lost.

- **Reduce time and costs** by having both monitoring and investigation capabilities in one solution – avoiding current potentially cumbersome processes.

- **Corroborate other fraud monitoring controls** through evidence-based actions of the user.

# It’s what’s inside that counts: transforming investigations to detect and prevent insider threats

Questions?

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