**Question 1: what did you do?**

*Overview*

In general, I created an identification system that uses the first letter in a name and ensured there were no repeated letters in the classification scheme. In the event there was a repeat in first letter characters in the identification system, I simply added a second letter to make it unique. Example is Person. Person used a P while Software used an S. Exception to this was Procedures where I elected to designate R for Routine. For System identification, I added a similar naming convention.

The key point was grouping like or similar less risky assets together and being able to identify them within the grouping. This adopted either a first character or the first two characters of the name or category of the subject, thing or person. The reasoning is I wanted it searchable in two ways. ID class and system ID class. This way I can identify the association with the application. This also condenses the list since repeats are reduce significantly. Exceptions to this rule are the F1 to F4 and So classifications. I’ve grouped everyone I can recall from memory in the F1 to F4 classifications so this would be a hundred or more people. This is the same for So, the sheer number of applications I have that I no longer use would add possibly a hundred more to the list. Afterall, if this was in a database, this would be overly redundant. I admit it has some redundancy, but I do not intend to put this list in a database. I have provided a legend key at the end of this paper to provide some clarity on the classifications.

*Person*

This was one of the easier tasks to do. Both my parents are deceased, and my circle of immediate family is very small. I have one brother and a wife and daughter. I listed them down individually. The next part was create groups for lists of my friends, family and co-workers. The criteria I used was how much data do they have on me? I used past and current history as key identifiers. My brother had the most knowledge of my past as well as my present situation. The next would be my wife. An exception is my daughter due to familial bond, so she is listed individually.

The next in line were my best friends. Most were childhood or military friends so the knowledge they had at best were my past. I do contact them frequently, but our conversations were superficial at best. I have been told I am a very secretive, non-talkative person. I do consider them individuals I would drop what I am doing to help them out though. The groupings I used were best friends, distant relatives, distant friends and co-workers. Each group was assigned a system ID that allowed me to list each individually by name but due to the impact of their knowledge, it was a non-risk for me.

*Procedures (Routines)*

Per your advice, I started logging my routines over the course of two days. I started to see patterns and lumped activities into routines. Morning, Lunch, Work end, Dinner and Bedtime routine were done daily at least five times a week. Other routines were seven days a week such as lunch. There were variances but I considered you didn’t need that kind of detail. I just finished shopping last weekend, so I added grocery as a bi-weekly activity. Day-care was included as I sometimes do this in the morning but not always, so it is separated from morning routine.

*Data*

I have classified two categories for data. Soft and hard data. Soft is for digital and hard represents the physical data like identification (ID) cards. I have determined that there is a bunch of overlap between soft data and software. I decided to designate a system ID to the software classification and designate an ID for soft data category. An example would be Dropbox. It is an app that contains digital data. Dropbox app would be classed as software with S27. Any file in Dropbox, like my 2019 Tax Return, would be given two IDs. First, it would get a soft data classification of SD2 and a Dropbox system ID of D2. For hard data, I did a physical check of areas where I stored my documents. Anything with PII was deemed important enough to put on the list. Soft data was checked at the same time as software. In some cases, soft data were just digital PDF versions of documents like my tax return. The process for this was to go to every device and check which applications I used frequently.

*Software*

Software and hardware were the most difficult to classify since there is a lot of overlap. I went with the simple classification of was it physical or not? If it was a software that contained apps or communicated with physical items then it was contained in the system ID. Hardware items connected to software applications were given a Hardware category ID. To find these items, I went to every device, checked the application and listed only the applications that were used frequently.

*Hardware*

As mentioned above in Software, this was one of the most difficult to classify. Hardware items connected to applications were given Hardware category ID. Software applications were given a system ID under the application. I physically went to every room and did an inventory of what was there that was relevant. I annotated what was and placed it in the list.

*Networking*

I did a physical check of my network inventory. The main router is in my garage, and this is the main unit for my internet company. My Wi-Fi router is in the main bedroom along with the main switch. The guest bedroom switch exists since it feeds a TV and computer. Media room switch feeds multiple TVs and gaming systems. This required a physical check as well. I entered every room and checked what networking device was in the room.

**Question 2: what were the results?**

The list of assets that I own formed a massive attack surface. This is much larger than I expected. I also must expect that I have not covered everything 100%. I’ve learned, and there might be some disagreement here, but you can never fully meet 100% in an audit. There will always be something that isn’t quite right or got missed. Another thing I noticed is that I never thought to consider each app, software or device is an invitation to be used to gain more information on me until I had the list in front of me.

The big assets that I consider very important were my personal laptop and phones. These devices possess data and software related to my financials, personal information like emails and sign in information. The sheer amount of information these three devices, if stolen, could literally destroy me financially and could create a whole picture of who I am in a dossier.

**Question 3: what did you learn?**

The list of assets I own is simply too much. The total count was roughly 152. I have engrossed myself in IOT and applications through my laptop, phones and other devices that my information is spread across everywhere. I’ve taken for granted that convenience and what is free comes at a cost. My data is the cost. The big three assets that I consider very important were my personal laptop and phones. These devices possess data and software related to my financials, personal information like emails and sign in information. The sheer amount of information these three devices, if stolen, could literally destroy me financially and could create a whole picture of who I am in a dossier.

I think I am at the point where I will not be getting “more stuff” but I will be replacing existing devices or applications. In short, I do not think my attack surface will increase but will be maintained. My digital footprint is large and the best I can do is make sure I update passwords regularly and remove applications or services I no longer use or cancelled from my devices. I must stress that the sheer number of applications I no longer use on my devices was extremely high. I’m thinking hundreds here. I am aware that some applications only need to be installed on your device to capture geolocation or personal data. After this paper, I will revisit my devices and uninstall the ones I no longer use.

Finally, I have identified what my big three items are that I must always keep aware of and safeguard. The biggest item is my phone. It is the most important asset I have. The damage that it causes me if it fell into the wrong hands would be life destroying. I might need to reconsider what I keep on my phone and see if there are other ways to ensure this doesn’t. Unfortunately, I do not think I will be able to sacrifice the convenience, and it goes to show how much I’m invested in and tied to technology. To counter the current set up, I would just have to remove the financials and use a web browser on a secure device to access accounts and whatever else. The thought of the sheer amount of inconvenience this would cause me makes me want to curse every malicious hacker in the world.

Asset Inventory and Risk Assessment Table Template.

|  |  |  |  |
| --- | --- | --- | --- |
| Sys ID key |  | ID key | |
| F1 | Subcategory of friends. Categorized as F1.1 and so on | P | Person category |
| F2 | Subcategory of friends. Categorized as F2.1 and so on | R | Procedure(routine) category |
| F3 | Subcategory of family. Categorized as F3.1 and so on | HD | Hard data category |
| F4 | Subcategory of co-workers. Categorized as F4.1 and so on | S | Software category. Includes soft data. |
| So | Subcategory for list of apps not used frequently. Categorized as So1, So2 and so on | H | Hardware category |
| L | Subcategory for list of lights. Categorized as L1, L2 and so on | N | Network category |
| W | Subcategory for list of Wyze cameras. Categorized as W1, W2 and so on | SD | Soft data category |
| A | Subcategory for list of Arlo cameras. Categorized as A1,A2 and so on |  |  |
| V | Subcategory for list of Vector Security IOT devices. Categorized as V1, V2 and so on |  |  |
| iC | Subcategory for list of iComfort IOT devices. Categorized as iC1, iC2 and so on |  |  |
| Wi | Subcategory for list of Winix IOT devices. Categorized as Wi1, Wi2 and so on |  |  |
| D | Subcategory for list of Dropbox App. Categorized as D1, D2 and so on |  |  |
| O | Subcategory for list OneDrive app. Categorized as O1, O2 and so on |  |  |
| C | Subcategory for list of Car and apps. Categorized as C1, C2 and so on |  |  |
| M | Subcategory for list of Minivan and apps. Categorized as M1, M2 and so on |  |  |
| T | Subcategory for list of Tablet and apps. Categorized as T1, T2 and so on |  |  |
| R | Subcategory for list of Roku device and apps. Categorized as R1, R2 and so on |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Count | ID | Asset Name | Description | Sys ID |
| 1 | P2 | Me | Me | N/A |
| 2 | P2 | Spouse | Spouse | N/A |
| 3 | P3 | Brother | Brother | N/A |
| 4 | P4 | Daughter | Daughter | N/A |
| 5 | P5 | Best friends | List includes friends who know my past history and I frequently contact | F1 |
| 6 | P6 | Distant friends | List of friends I no longer keep in touch but knew my past history | F2 |
| 7 | P7 | Co-workers | List of current and past co-workers | F3 |
| 8 | P8 | Relatives | Grouped all relatives that I do not keep in touch with but know some past history of me | F4 |
| 9 | R1 | Morning routine | Workout, shower and drive to or start work | N/A |
| 10 | R2 | Lunch work routine | Starts daily around 1PM. Same trip to Target. | N/A |
| 11 | R3 | Work end routine | Drive home | N/A |
| 12 | R4 | Dinner routine | Starts daily around 6PM. | N/A |
| 13 | R5 | Bedtime routine | Shower, brush teeth, shave and ready for sleep | N/A |
| 14 | R6 | Shopping routine | Bi-weekly grocery shopping to Costco or Kroger | N/A |
| 15 | R7 | Daycare drop off routine | Daycare drop off routine | N/A |
| 16 | HD1 | Driver License | Driver License card | N/A |
| 17 | HD2 | VA ID | Veteran's Affair ID card | N/A |
| 18 | HD3 | Citi Credit Card | Credit Card with credit card info | N/A |
| 19 | HD4 | Ally Debit Card | Debit card with debit card info | N/A |
| 20 | HD5 | 2019 Tax returns | 2019 Tax returns | N/A |
| 21 | HD6 | 2020 Tax returns | 2020 Tax returns | N/A |
| 22 | HD6 | Car title | Car title | N/A |
| 23 | S1 | Spotify | Phone app for music | N/A |
| 24 | S2 | Ally Bank App | Phone app for banking | N/A |
| 25 | S3 | Venmo app | Phone app for banking | N/A |
| 26 | S4 | Citi bank app | Phone app for credit | N/A |
| 27 | S5 | Linkedin app | Phone app for social media | N/A |
| 28 | S6 | Message app | Default Samsung phone app for text messages | N/A |
| 29 | S7 | Gmail app | Phone app for google e-mails | N/A |
| 30 | S8 | Outlook app | Phone app for school e-mails | N/A |
| 31 | S9 | Twitter | Phone app for social media | N/A |
| 32 | S10 | MS Authenticator app | Phone app for authentication verification | N/A |
| 33 | S11 | Duo mobile app | Phone app for authentication verification | N/A |
| 34 | S12 | Google Authenticator | Phone app for authentication verification | N/A |
| 35 | S13 | SQEX Token | Phone app for authentication verification | N/A |
| 36 | S14 | Amazon app | Phone app for shopping | N/A |
| 37 | S15 | Chick-fil-A app | Phone app for food orders | N/A |
| 38 | S16 | Cash app | Phone app for banking | N/A |
| 39 | S17 | TD Ameritrade app | Phone app for investments | N/A |
| 40 | S18 | Fidelity app | Phone app for investments | N/A |
| 41 | S19 | Lutron App | Phone app for all lights/fans | L1 |
| 42 | H1 | Light 1 | Light 1 | L2 |
| 43 | H2 | Light 2 | Light 2 | L3 |
| 44 | H3 | Light 3 | Light 3 | L4 |
| 45 | H4 | Light 4 | Light 4 | L5 |
| 46 | H5 | Light 5 | Light 5 | L6 |
| 47 | H6 | Light 6 | Light 6 | L7 |
| 48 | H7 | Light 7 | Light 7 | L8 |
| 49 | H8 | Light 8 | Light 8 | L9 |
| 50 | H9 | Light 9 | Light 9 | L10 |
| 51 | H10 | Light 10 | Light 10 | L11 |
| 52 | H11 | Light 11 | Light 11 | L12 |
| 53 | H12 | Light 12 | Light 12 | L13 |
| 54 | H13 | Light 13 | Light 13 | L14 |
| 55 | H14 | Light 14 | Light 14 | L15 |
| 56 | H15 | Light 15 | Light 15 | L16 |
| 57 | H16 | Light 16 | Light 16 | L17 |
| 58 | H17 | Light 17 | Light 17 | L18 |
| 59 | H18 | Light 18 | Light 18 | L19 |
| 60 | H19 | Light 19 | Light 19 | L20 |
| 61 | H20 | Light 20 | Light 20 | L21 |
| 62 | H21 | Light 21 | Light 21 | L22 |
| 63 | H22 | Light 22 | Light 22 | L23 |
| 64 | H23 | Light 23 | Light 23 | L24 |
| 65 | H24 | Light 24 | Light 24 | L25 |
| 66 | H25 | Light 25 | Light 25 | L26 |
| 67 | H26 | Light 26 | Light 26 | L27 |
| 68 | H27 | Light 27 | Light 27 | L28 |
| 69 | H28 | Light 28 | Light 28 | L29 |
| 70 | H29 | Light 29 | Light 29 | L30 |
| 71 | H30 | Light 30 | Light 30 | L31 |
| 72 | H31 | Light 31 | Light 31 | L32 |
| 73 | H32 | Light 32 | Light 32 | L33 |
| 74 | H33 | Light 33 | Light 33 | L34 |
| 75 | H34 | Light 34 | Light 34 | L35 |
| 76 | H35 | Light 35 | Light 35 | L36 |
| 77 | H36 | Light 36 | Light 36 | L37 |
| 78 | H37 | Light 37 | Light 37 | L38 |
| 79 | H38 | Light 38 | Light 38 | L39 |
| 80 | H39 | Light 39 | Light 39 | L40 |
| 81 | H40 | Light 40 | Light 40 | L41 |
| 82 | H41 | Light 41 | Light 41 | L42 |
| 83 | H42 | Light 42 | Light 42 | L43 |
| 84 | H43 | Light 43 | Light 43 | L44 |
| 85 | H44 | Light 44 | Light 44 | L45 |
| 86 | S20 | Wyze app | Phone app for in-house cameras | W1 |
| 87 | H45 | Camera 1 | Camera 1 | W2 |
| 88 | H46 | Camera 2 | Camera 2 | W3 |
| 89 | H47 | Camera 3 | Camera 3 | W4 |
| 90 | H48 | Camera 4 | Camera 4 | W5 |
| 91 | H49 | Camera 5 | Camera 5 | W6 |
| 92 | H50 | Camera 6 | Camera 6 | W7 |
| 93 | S21 | Arlo app | Phone app for outside cameras | A1 |
| 94 | H51 | Camera 1 | Camera 1 | A2 |
| 95 | H52 | Camera 2 | Camera 2 | A3 |
| 96 | H53 | Camera 3 | Camera 3 | A4 |
| 97 | H54 | Camera 4 | Camera 4 | A5 |
| 98 | H55 | Camera 5 | Camera 5 | A6 |
| 99 | H56 | Camera 6 | Camera 6 | A7 |
| 100 | S22 | Vector Security app | Phone app for in-house alarm system | V1 |
| 101 | H57 | Door alarm | Door alarm | V2 |
| 102 | H58 | Big window alarm | Big window alarm | V3 |
| 103 | H59 | Back door alarm | Back door alarm | V4 |
| 104 | H60 | Glass break alarm | Glass break alarm | V5 |
| 105 | S24 | iComfort app | Phone app for HVAC system | iC1 |
| 106 | H61 | Upstairs thermostat | Upstairs thermostat | iC2 |
| 107 | H62 | Downstairs thermostat | Downstairs thermostat | iC3 |
| 108 | S25 | Winix Smart app | Phone app for air purifiers | Wi1 |
| 109 | H63 | Main bedroom air purifier | Main bedroom air purifier | Wi2 |
| 110 | H64 | Guest bedroom air purifier | Guest bedroom air purifier | Wi3 |
| 111 | S26 | Apps on phone not used frequently | Grouped all apps on phone as they may gather location and personal data while installed | So1 |
| 112 | S27 | Dropbox App | Laptop and phone app for storging files and data | D1 |
| 113 | SD1 | Resume | Resume | D1 |
| 114 | SD2 | 2019 Tax return | 2019 Tax return | D2 |
| 115 | SD3 | 2020 Tax return | 2020 Tax return | D3 |
| 116 | SD4 | 2021 Tax return | 2021 Tax return | D4 |
| 117 | SD5 | Mortgage records | Mortgage PDF record | D5 |
| 118 | S28 | OneDrive app | Laptop app for storing school files and data | O1 |
| 119 | SD6 | Resume | Resume | O2 |
| 120 | S29 | GoogleMaps app | Google Maps App | N/A |
| 121 | H65 | Asus Laptop | Main Personal laptop | N/A |
| 122 | H66 | Back up Laptop | Laptop used for traveling mainly | N/A |
| 123 | H67 | Living room desktop | Living room desktop | N/A |
| 124 | H68 | Bedroom desktop | Bedroom desktop | N/A |
| 125 | H69 | Personal Phone | Samsung 10+ | N/A |
| 126 | H70 | Work phone | iPhone XR | N/A |
| 127 | H71 | Playstation 5 | Media room gaming system | N/A |
| 128 | H72 | Playstation 5 | Media room gaming system | N/A |
| 129 | H73 | Playstation 4 | Media room gaming system | N/A |
| 130 | H74 | Playstation 4 | Media room gaming system | N/A |
| 131 | H75 | Living room TV | TV | N/A |
| 132 | H76 | Bedroom TV | TV | N/A |
| 133 | H77 | Media room TV | TV | N/A |
| 134 | H78 | Media room TV | TV | N/A |
| 135 | H79 | iPad Tablet | iPad Tablet | T1 |
| 136 | S30 | Netflix app | Netflix app | T3 |
| 137 | S31 | Hulu app | Hulu app | T4 |
| 138 | H80 | Car | Car | C1 |
| 139 | S32 | Bluetooth app | Bluetooth App | C2 |
| 140 | H81 | Mini van | Mini van | M1 |
| 141 | S33 | Android Auto App | Android Auto App | M2 |
| 142 | S34 | Google Maps app | Google Maps App | M3 |
| 143 | S35 | Bluetooth app | Bluetooth App | M4 |
| 144 | H82 | Roku App | Roku App | R1 |
| 145 | S36 | Netflix app | Netflix app | R2 |
| 146 | S37 | Hulu app | Hulu app | R3 |
| 147 | N1 | Modem | Modem | N/A |
| 148 | N2 | Router | Router | N/A |
| 149 | N3 | Main Switch | Main switch to router | N/A |
| 150 | N4 | Bedroom switch | Bedroom switch | N/A |
| 151 | N5 | Living room switch | Living room switch | N/A |
| 152 | N6 | Media room switch | Media room switch | N/A |