

# Sample Pty Ltd

Cyber Security Assessment for Board/C Suite  
focused on handling Sensitive Data and in line  
with DISP , ITAR and ACSC ISM



# Briefing Intent

- This sample is indicative of the report which you'll receive at the end of an assessment.
- This redacted report is from assessments done on a number of Defence Suppliers.
- The report provides clarity around the type of user behaviour, data movement and cyber risks that you can expect to be covered during the assessment.

# Assessment Scope

The scope of GuardWare Assessment is to assess Client's current security processes and controls (ISMS) based on the following criteria:

- 1. Ability to securely handle commercially sensitive data in line with Information Security Manual (ISM) recommendations.**
- 2. Ability to securely handle Defence related data in line with the requirements of Entry Level DISP.**
- 3. Ability to securely handle ITAR related data.**

Note: Physical security of office environment and equipment is out of scope for this project.

# Assessment Summary

## Monitoring Parameters:

- Only Client owned devices were covered.
- The following types of data were monitored:
  - Sensitive data covering ITAR and Defence labelled information
  - Generic Documents
  - General files of any type including source code, images, zip etc
- Monitoring USE CASES included those recommended under ACSC ISM, ITAR and for secure handling for Defence Related Data under DISP.

|                                                                                  |                                                                                 |
|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Monitoring done from 26 <sup>th</sup> Nov to 13 <sup>th</sup> Dec 2022           | 158 users monitored on 146 devices                                              |
| 16 High risk actions detected which require urgent attention                     | 4 Medium risk actions detected                                                  |
| 2 suspicious activities detected – Need urgent action                            | No controls in place to ensure secure handling of Sensitive data                |
| No incident detection capability present in the event of a loss or theft of data | Non-Compliance with 2 of ES8 control. App Control and Restrict Admin privileges |
| Non-Compliance with Secure Defence data handling procedures as per DISP and ISM  | Non-Compliance with ITAR regulation.                                            |

# Risk Summary

| Use Cases                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Technical Control Implemented/Partial/Not Implemented/Failed Control | Risk Level (No Risk, Low, Medium, High) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------|
| <b>Data transfer using external storage media</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                      |                                         |
| <b>High use of unencrypted USBs.</b> 44 users detected using unencrypted USBs to transfer data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Technical control not implemented                                    | High                                    |
| <b>High transfer rate.</b> 8 users transferred over 1000 files.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Technical control not implemented                                    | High                                    |
| <b>Outside of normal business hours.</b> High rate of transfers detected outside of normal working hours.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Technical control not implemented                                    | High                                    |
| <b>Transfer of Potential Sensitive Data.</b> <ul style="list-style-type: none"> <li>Top 8 users detected transferring 1000s of design related files.</li> <li>Several users transferred files containing potential sensitive data</li> </ul>                                                                                                                                                                                                                                                                                                                                                                      | Technical control not implemented                                    | High                                    |
| <b>Visibility of transfers.</b> Visibility of sensitive data transferred using external media                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Technical control not implemented                                    | High                                    |
| <b>Suspicious User Activities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                      |                                         |
| <b>Suspicious User Activity – User1 - Use of personal emails to send corporate data</b> <ol style="list-style-type: none"> <li>User detected using his personal email to send highly sensitive ITAR marked data to unauthorized 3<sup>rd</sup> parties.</li> <li>Non-Compliance under ITAR.</li> </ol>                                                                                                                                                                                                                                                                                                            | Technical control not implemented                                    | High                                    |
| <b>Suspicious User Activity – User2 – Data copied by user about to leave the organisation.</b> <ol style="list-style-type: none"> <li>User copied 1000s of design files also printed his CV during the same time.</li> <li>There is evidence he has visited job sites (Indeed) and applied for Defence related engineering jobs around the same time when he copied the files.</li> <li>The files have been copied on unencrypted USBs which most likely are personal.</li> <li>He is also seen accessing and uploading files to personal Google Drive.</li> <li>He belongs to the Defence User Group.</li> </ol> | Technical control not implemented                                    | High                                    |

| Use Cases                                                                                                                                                                                                                                       | Technical Control Implemented/Partial/Not Implemented/Failed Control | Risk Level (No Risk, Low, Medium, High) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------|
| <b>Corporate Email Analysis</b>                                                                                                                                                                                                                 |                                                                      |                                         |
| <b>Corporate emails forwarded to own personal emails.</b> Email detected being forwarded to user own personal email.                                                                                                                            | Technical control not implemented                                    | Medium                                  |
| <b>Visibility of email forwards.</b> Visibility of what files have been forwarded by users to personal and free emails to ensure they are accounted for.                                                                                        | Technical control not implemented                                    | High                                    |
| <b>Use of Personal Emails</b>                                                                                                                                                                                                                   |                                                                      |                                         |
| <b>Use of Personal emails detected.</b> Personal emails have been used to send data.                                                                                                                                                            | Technical control not implemented                                    | High                                    |
| <b>Visibility of Personal Email Use.</b> Visibility is required to ensure company data is not being sent out via personal emails.                                                                                                               | Technical control not implemented                                    | High                                    |
| <b>Use of Non Organisational Unauthorised Applications</b>                                                                                                                                                                                      |                                                                      |                                         |
| <b>Technical Control Circumvented.</b> The users seem to have found a way to install non-organisational applications.<br><br><b>Non-Compliance of 2 of the ES8 Controls.</b><br>1. Restrict administrative privileges<br>2. Application control | Failed Technical Control                                             | High                                    |
| <b>Visibility of Application Use.</b> Visibility of what applications are being used by users.                                                                                                                                                  | Technical control not implemented                                    | High                                    |
| <b>Data transfer using Non-Corporate Data sharing APPs and Websites</b>                                                                                                                                                                         |                                                                      |                                         |
| <b>Risky Transfer Application Use.</b> 6 users detected using Dropbox or Google Drive to transfer files. Transfers include potentially sensitive data.                                                                                          | Failed Technical Control                                             | High                                    |
| <b>Risky website Use.</b> 19 users detected using Facebook and potentially transferring data.                                                                                                                                                   | Technical control not implemented                                    | High                                    |
| <b>Visibility of transfers.</b> Visibility of sensitive data transferred using APPs and encrypted websites.                                                                                                                                     | Technical control not implemented                                    | High                                    |

| Use Cases                                                                                                                                                  | Technical Control Implemented/Partial/Not Implemented/Failed Control | Risk Level (No Risk, Low, Medium, High) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------|
| <b>Printing of Sensitive Data</b>                                                                                                                          |                                                                      |                                         |
| <b>Printing of potential sensitive data.</b> Printing of sensitive data was observed.                                                                      | Technical control not implemented                                    | Medium                                  |
| <b>Printing use personal Printers.</b> As users are allowed to work from home there is risk of files being printed using home printers.                    | Technical control not implemented                                    | Medium                                  |
| <b>Visibility of Printing.</b> Visibility of what files have been printed either via organisational or personal printers to ensure they are accounted for. | Technical control not implemented                                    | Medium                                  |
| <b>Access of information</b>                                                                                                                               |                                                                      |                                         |
| <b>Authorised Access of sensitive Information.</b> Ensuring authorised users can access files                                                              | Implemented                                                          | No Risk                                 |
| <b>Access Visibility.</b> Visibility of who is accessing what files                                                                                        | Implemented                                                          | No Risk                                 |

# Trusted Insider Program monitoring suggestion as per ISM and DISP

## Trusted insider program

As a trusted insider's system access and knowledge of business processes often makes them harder to detect, establishing and maintaining a trusted insider program can assist an organisation to detect and respond to trusted insider threats before they occur, or limit damage if they do occur. In doing so, an organisation will likely obtain the most benefit by logging and analysing the following user activities:

1. excessive copying or modification of files
2. unauthorised or excessive use of removable media
3. connecting devices capable of data storage to systems
4. unusual system usage outside of normal business hours
5. excessive data access or printing compared to their peers
6. data transfers to unauthorised cloud services or webmail
7. use of unauthorised Virtual Private Networks, file transfer applications or anonymity networks.

**Control: ISM-1625; Revision: 1; Updated: Dec-22; Applicability: All; Essential Eight: N/A**

*A trusted insider program is developed, implemented and maintained.*

**Control: ISM-1626; Revision: 0; Updated: Nov-20; Applicability: All; Essential Eight: N/A**

*Legal advice is sought regarding the development and implementation of a trusted insider program.*

Reference: ACSC Information Security Manual.

# Mapping to Trusted Insider USE CASEs as per ACSC ISM

| Recommended Use Cases Under ISM                                                                 | Detected/Not Detected/Not Tested |
|-------------------------------------------------------------------------------------------------|----------------------------------|
| excessive copying or modification of files                                                      | Detected                         |
| unauthorised or excessive use of removable media                                                | Detected                         |
| connecting devices capable of data storage to systems                                           | Detected                         |
| unusual system usage outside of normal business hours                                           | Detected                         |
| excessive data access or printing compared to their peers                                       | Detected                         |
| data transfers to unauthorised cloud services or webmail                                        | Detected                         |
| use of unauthorised Virtual Private Networks, file transfer applications or anonymity networks. | Detected                         |

# Mapping to Entry Level DISP requirements

| Entry Level DISP Requirements                                                                                                                                                                                                                                                           | Current Status in Client                                                                                                                                                                                                                                                                                  | Compliant/Non-Compliant |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <p>Meeting top 4 requirements of the ACSC Essential 8:</p> <ul style="list-style-type: none"> <li>• Application control;</li> <li>• Patch applications;</li> <li>• Restrict administrative privileges;</li> <li>• Patch operating systems</li> </ul>                                    | <p>Potential use of non-organisational applications has been observed. If these were explicitly not allowed by Admin the company will fail the following ACSC ES8 Controls.</p> <ol style="list-style-type: none"> <li>1. Restrict administrative privileges.</li> <li>2. Application control.</li> </ol> | Non-Compliant           |
| <p>Handling Official and Official Sensitive information as per DSPF and ISM. The requirements place a <b>Need to</b> requirement when accessing, transferring and printing sensitive information. Further transfer of Official information should be done using encrypted channels.</p> | <p>The company lacks visibility of users accessing, transferring and printing data and has no technical means to verify the <b>Need</b> of any of the actions. Further use of unencrypted external storage devices has been observed.</p>                                                                 | Non-Compliant           |
| <p>Insider Threat Program. Under this requirement users are required to handle sensitive information appropriately.</p>                                                                                                                                                                 | <p>The company lacks visibility of users accessing, transferring and printing data and has no way to verify if the correct steps are being taken by the staff members on an ongoing basis</p>                                                                                                             | Non-Compliant           |
| <p>Incident Detection and Response. Under this requirement clear visibility of risky incidents involving sensitive data is required. Only when you know that data has been put at risk can you try and address it through appropriate responses.</p>                                    | <p>The company lacks visibility of users accessing, transferring and printing data. This can place company's data at risk without their knowledge.</p>                                                                                                                                                    | Non-Compliant           |

# SharePoint Risks

Covers Sharing and access of files by internal and external users.

# SharePoint Risk – Monitoring and Control of External User Access

| SharePoint Risk                                                                                                                                                                                       |                                          |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------|
| <b>Visibility of Downloads of Files by internal and external users.</b> Visibility of what files have been downloaded by internal and external users. Once downloaded, we lose control over the data. | <b>Technical control not implemented</b> | <b>High</b> |
| <b>Visibility of Shared Files to external users.</b> Visibility of what files have been shared to external users.                                                                                     | <b>Technical control not implemented</b> | <b>High</b> |

SharePoint is Defacto File server for most organisations which is accessible from anywhere and from any device including personal devices.

**Risk 1:** Monitoring of files accessed by internal and external users is critical to ensure security of data.

**Risk 2:** Wrong configuration of libraries can easily result in access of sensitive data by internal and external users when shared.

**Risk 3:** Sensitive data can be shared accidentally to unauthorised external users.

## ● Sharepoint Access External

Q

Search

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By File

By User

| File Name                                            | Number of Users | Number of Incidents |
|------------------------------------------------------|-----------------|---------------------|
| e-Safe Compliance User Manual v2 Draft 4.docx        | 1               | 18                  |
| Exercise 1 Map the data to its classification .docx  | 1               | 8                   |
| Guardware - Data Monitoring and scoping form v3.xlsx | 1               | 11                  |
| Guardware Company Decisions.xlsx                     | 1               | 8                   |
| GuardWare INSIGHT User Manual v2.pdf                 | 1               | 6                   |

## ● Sharepoint Access External > GuardWare INSIGHT User Manual v2.pdf

Q

Search

🔍

By User

| User Name | Email Address     | Site Url                                                     | File Path                                                        | Date Time           | Incident Type     |
|-----------|-------------------|--------------------------------------------------------------|------------------------------------------------------------------|---------------------|-------------------|
| richard   | richard@gmail.com | https://guardwarecomau.sharepoint.com/sites/GuardWareSupport | Shared Documents/Trainings and help files/Overall System Manual/ | 2025-01-24 04:34:32 | AnonymousLinkUsed |
| richard   | richard@gmail.com | https://guardwarecomau.sharepoint.com/sites/GuardWareSupport | Shared Documents/Trainings and help files/Overall System Manual/ | 2025-01-24 04:34:32 | SharingLinkUsed   |
| selina    | selina@yahoo.com  | https://guardwarecomau.sharepoint.com/sites/GuardWareSupport | Shared Documents/Trainings and help files/Overall System Manual/ | 2025-01-10 04:15:35 | AnonymousLinkUsed |
| selina    | selina@yahoo.com  | https://guardwarecomau.sharepoint.com/sites/GuardWareSupport | Shared Documents/Trainings and help files/Overall System Manual/ | 2025-01-10 04:15:35 | SharingLinkUsed   |

# SharePoint Risk – Files downloaded to personal devices. There is a need for Visibility.

## Sharepoint Audit Logs

☒ By File
 ☒ By Platform
 ☐ By IP address

| Platform Name ↓            | Secure link created | Anonymous Link Created | Accessed by(internal) | Accessed by(external) | Downloaded by(internal) | Downloaded by(external) |
|----------------------------|---------------------|------------------------|-----------------------|-----------------------|-------------------------|-------------------------|
| -                          | 0                   | 0                      | 8,735                 | 37                    | 0                       | 0                       |
| Android                    | 1                   | 0                      | 6                     | 0                     | 1                       | 0                       |
| iPhone                     | 0                   | 0                      | 32                    | 5                     | 11                      | 0                       |
| MacOSX                     | 1                   | 15                     | 47                    | 35                    | 10                      | 6                       |
| NotSpecified               | 82                  | 0                      | 622                   | 16                    | 115                     | 0                       |
| OfficeCollaborationService | 0                   | 0                      | 50                    | 0                     | 0                       | 0                       |

- Files downloaded by users which can be to Corporate and personal devices
- Need to ensure visibility of data.

| Android               |                         |
|-----------------------|-------------------------|
| Accessed by(internal) | Downloaded by(internal) |
| Username              | Username2               |
| rizwan.m              | simon.s                 |
| grishma.k             |                         |
| roshan.b              |                         |

| MacOSX                 |                       |                         |
|------------------------|-----------------------|-------------------------|
| Anonymous Link Created | Accessed by(external) | Downloaded by(external) |
| Username3              | Username4             | Username5               |
| priti jan.m            | anonymous             | anonymous               |
| rabin.t                |                       |                         |
| prakash.c              |                       |                         |

| iPhone                |                       |                         |
|-----------------------|-----------------------|-------------------------|
| Accessed by(internal) | Accessed by(external) | Downloaded by(internal) |
| Username6             | Username7             | Username8               |
| richard.m             |                       | akhil.s                 |
| akhil.s               |                       | richard.m               |
|                       |                       | selina.t                |

# Risky Sharing of Data

| Data transfer using external storage media                               |                                   |      |
|--------------------------------------------------------------------------|-----------------------------------|------|
| Files shared using anonymous links to external users..                   | Technical control not implemented | High |
| Sensitive files shared to external users. Potential Unauthorised access. | Technical control not implemented | High |

Sharepoint has made access and sharing of information incredibly easy and accessible from anywhere. Unfortunately, users often tend to have the false sense of security that all data in SharePoint is secured. Reality is if SharePoint is not configured properly and monitored it can easily become a major source of data leak.

**Risk 1:** Anonymous sharing is a risky action. As external users can simply share and access the link without any check and balance.

**Risk 2:** Sensitive data can be maliciously or unknowingly shared by authorised users to internal or external unauthorized users.

## Anonymous Sharing of files

| File Name                            | Anonymous Link Created | Accessed by(internal) | Accessed by(external) |
|--------------------------------------|------------------------|-----------------------|-----------------------|
| GuardWare INSIGHT User Manual v2.pdf | <u>1</u>               | <u>15</u>             | <u>6</u>              |

Sensitive data accessed by external users

# SharePoint Risk → Ensure Authorised Internal Company Access to libraries and files.

## Sharepoint Library

### Library Name

| User Name | Library Name                                  | Site Name                                                           | File Name                            | Secure link created | Anonymous Link Created | Accessed by(internal) | Accessed by(external) | Downloaded by(internal) |
|-----------|-----------------------------------------------|---------------------------------------------------------------------|--------------------------------------|---------------------|------------------------|-----------------------|-----------------------|-------------------------|
| selina.t  | Shared Documents/Development/DevelopmentPlan/ | https://guardwarecomau.sharepoint.com/Documents/INSIGHTDevelopment/ | GuardWare INSIGHT User Manual v2.pdf | 0                   | 1                      | 15                    | 6                     | 0                       |
| akhil.s   | Deployment/Report/                            | https://guardwarecomau.sharepoint.com/Documents/Schedule/           | INSIGHT Report Update v1.docx        | 0                   | 0                      | 26                    | 5                     | 15                      |



## Sharepoint Library > Accessed By (Internal) > Shared Documents/Development/DevelopmentPlan/

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### By User

| User Name | Email Address             | SiteUrl                                                             | File Path                                     | Incident Date | Incident Time | Incident Type |
|-----------|---------------------------|---------------------------------------------------------------------|-----------------------------------------------|---------------|---------------|---------------|
| selina.t  | selina.t@guardware.com.au | https://guardwarecomau.sharepoint.com/Documents/INSIGHTDevelopment/ | Shared Documents/Development/DevelopmentPlan/ | 2024-12-30    | 07:14:10      | FilePreviewed |
| selina.t  | selina.t@guardware.com.au | https://guardwarecomau.sharepoint.com/Documents/INSIGHTDevelopment/ | Shared Documents/Development/DevelopmentPlan  | 2024-12-30    | 22:39:51      | FilePreviewed |

- Access and download of files by users. Need to ensure it is authorised access.
- Need to ensure visibility of data.

# Anonymous Access - SharePoint Risk

● Sharepoint File log > Anonymous Link Created > File name > GuardWare INSIGHT User Manual v2.pdf

🔍 By User

| User Name | Site Url                                                     | File Path                                                        | Email Address            | Incident Date | Incident Time | Incident Type        |
|-----------|--------------------------------------------------------------|------------------------------------------------------------------|--------------------------|---------------|---------------|----------------------|
| akhil.s   | https://guardwarecomau.sharepoint.com/sites/GuardWareSupport | Shared Documents/Trainings and help files/Overall System Manual/ | akhil.s@guardware.com.au | 2025-01-09    | 07:49:24      | AnonymousLinkCreated |

● Sharepoint File log > Downloaded By (External) > File name > GuardWare INSIGHT User Manual v2.pdf

🔍 By User

| User Name | Site Url                                                      | File Path                                                        | Email Address | Incident Date | Incident Time | Incident Type  |
|-----------|---------------------------------------------------------------|------------------------------------------------------------------|---------------|---------------|---------------|----------------|
| anonymous | https://guardwarecomau.sharepoint.com/sites/GuardWareSupport/ | Shared Documents/Trainings and help files/Overall System Manual/ | anonymous     | 2025-01-24    | 04:34:38      | FileDownloaded |
| anonymous | https://guardwarecomau.sharepoint.com/sites/GuardWareSupport/ | Shared Documents/Trainings and help files/Overall System Manual/ | anonymous     | 2025-01-10    | 04:15:41      | FileDownloaded |
| anonymous | https://guardwarecomau.sharepoint.com/sites/GuardWareSupport/ | Shared Documents/Trainings and help files/Overall System Manual/ | anonymous     | 2025-01-10    | 05:58:53      | FileDownloaded |

# Storage Media Analysis

Covers all types of media including phone sync.

# Data transfer using USBs

| Data transfer using external storage media                                                         |                                   |      |
|----------------------------------------------------------------------------------------------------|-----------------------------------|------|
| High use of unencrypted USBs. 44 users detected using unencrypted USBs to transfer data.           | Technical control not implemented | High |
| High transfer rate. 8 users transferred over 1000 files.                                           | Technical control not implemented | High |
| Outside of normal business hours. High rate of transfers detected outside of normal working hours. | Technical control not implemented | High |

The use of USBs may be for legitimate reasons but there are significant risks involved.

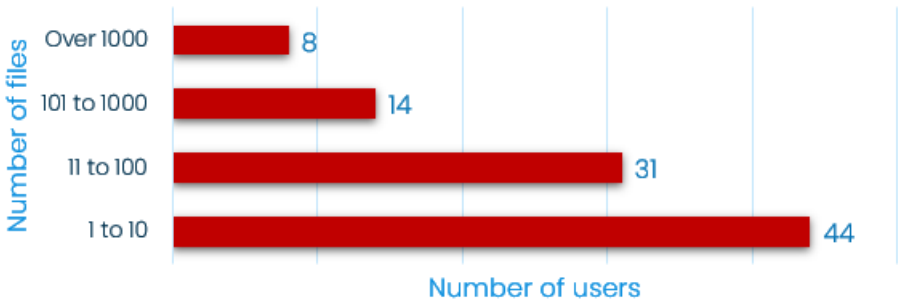
**Risk.** Loss of phone or USBs is a common source of data breach and should be monitored and accounted for.

**Risk.** Potential Insider risk. Non-compliant with Trusted Insider Program monitoring requirements as per the ISM.

**Risk.** Non-compliance risk to DISP/DSPF. Under these regulations there should be a valid NEED for transferring Defence related information and there should be appropriate visibility to ensure Insider Threat Management and Incident Response in case of loss.

**Risk.** Use of unencrypted USBs can easily lead to Data loss

Number of users transferring files to USBs



| User Name | User Group     | Total Events |
|-----------|----------------|--------------|
| xxxxx     | Customer Group | 26256        |
| xxxxx     | Customer Group | 5221         |
| xxxxx     | Customer Group | 4212         |
| xxxxx     | Customer Group | 3362         |
| xxxxx     | Customer Group | 2326         |
| xxxxx     | Customer Group | 2125         |
| xxxxx     | Customer Group | 1782         |
| xxxxx     | Customer Group | 1506         |
| xxxxx     | Customer Group | 9            |
| xxxxx     | Customer Group | 5            |
| xxxxx     | Customer Group | 4            |
| xxxxx     | Customer Group | 3            |
| xxxxx     | Customer Group | 2            |
| xxxxx     | Customer Group | 2            |

| Hour          | Working Day | Non-Working Day |
|---------------|-------------|-----------------|
| 0:00 - 1:00   | 0           | 0               |
| 1:00 - 2:00   | 0           | 0               |
| 2:00 - 3:00   | 0           | 0               |
| 3:00 - 4:00   | 0           | 0               |
| 4:00 - 5:00   | 0           | 0               |
| 5:00 - 6:00   | 0           | 0               |
| 6:00 - 7:00   | 0           | 0               |
| 7:00 - 8:00   | 0           | 0               |
| 8:00 - 9:00   | 562         | 0               |
| 9:00 - 10:00  | 41          | 320             |
| 10:00 - 11:00 | 10          | 8798            |
| 11:00 - 12:00 | 2           | 331             |
| 12:00 - 13:00 | 2221        | 4444            |
| 13:00 - 14:00 | 14          | 2144            |
| 14:00 - 15:00 | 5312        | 0               |
| 15:00 - 16:00 | 18620       | 0               |
| 16:00 - 17:00 | 421         | 0               |
| 17:00 - 18:00 | 2904        | 0               |
| 18:00 - 19:00 | 7563        | 0               |
| 19:00 - 20:00 | 33111       | 0               |
| 20:00 - 21:00 | 7           | 0               |
| 21:00 - 22:00 | 5           | 0               |
| 22:00 - 23:00 | 2           | 0               |
| 23:00 - 24:00 | 2           | 0               |

# Movement of Sensitive Data using USBs

| Data transfer using external storage media                                                                                                                                                                                                   |                                   |      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------|
| <b>Transfer of Potential Sensitive Data.</b> <ul style="list-style-type: none"> <li>Top 8 users detected transferring 1000s of design related files.</li> <li>Several users transferred files containing potential sensitive data</li> </ul> | Technical control not implemented | High |
| <b>Visibility of transfers.</b> Visibility of sensitive data transferred using external media                                                                                                                                                | Technical control not implemented | High |

**Risk.** Without the ability to monitor what is transferred, the company will not even know if data is lost or stolen and will not be able to perform Incident management.

**Risk.** Potential Insider risk. Non-compliant with Trusted Insider Program monitoring requirements as per the ISM.

**Risk.** Non-compliance risk to DISP/DSPF. Under these regulations there should be a valid NEED for transferring Defence related information and there should be appropriate visibility to ensure Insider Threat Management and Incident Response in case of loss.

**Risk.** Use of unencrypted USBs can easily lead to Data loss

|            |         |     |                                  |
|------------|---------|-----|----------------------------------|
| 08-12-2022 | 7:38:45 | 07  | ████████████████████.c9.svn-base |
| 08-12-2022 | 7:38:51 | 02  | ████████████████████.a.svn-base  |
| 08-12-2022 | 7:38:54 | 067 | ████████████████████89.svn-base  |
| 08-12-2022 | 7:38:54 | 06  | ████████████████████.c.svn-base  |
| 08-12-2022 | 7:38:54 |     | ████████████████████.drl         |
| 08-12-2022 | 7:38:54 |     | ████████████████████.cmp         |
| 08-12-2022 | 7:38:54 |     | ████████████████████.sol         |
| 08-12-2022 | 7:38:54 |     | ████████████████████.drl         |
| 08-12-2022 | 7:38:54 |     | ████████████████████.cmp         |
| 08-12-2022 | 7:38:54 |     | ████████████████████.stc         |
| 08-12-2022 | 7:38:54 |     | ████████████████████holes.txt    |
| 08-12-2022 | 7:38:54 |     | ████████████████████.es.txt      |
| 08-12-2022 | 7:39:11 |     | ████████████████████holes.txt    |
| 08-12-2022 | 7:39:11 |     | ████████████████████.es.txt      |

User 1

|            |          |  |                              |
|------------|----------|--|------------------------------|
| 29-11-2022 | 8:21:51  |  | ████████████████████.cad.csv |
| 29-11-2022 | 12:30:21 |  | ████████████████████nse2.pdf |
| 29-11-2022 | 12:30:21 |  | ████████████████████.pdf     |
| 29-11-2022 | 12:30:21 |  | ████████████████████_bom.csv |
| 29-11-2022 | 12:30:21 |  | ████████████████████_cad.csv |
| 29-11-2022 | 12:30:21 |  | ████████████████████_bom.csv |
| 29-11-2022 | 12:30:21 |  | ████████████████████_cad.csv |
| 05-12-2022 | 10:23:43 |  | ████████████████████.csv     |
| 05-12-2022 | 10:23:43 |  | ████████████████████.csv     |

User 2

|            |         |  |                                  |
|------------|---------|--|----------------------------------|
| 09-12-2022 | 7:48:12 |  | ████████████████████power.csv    |
| 09-12-2022 | 7:48:12 |  | ████████████████████spectrum.csv |
| 09-12-2022 | 7:48:12 |  | ████████████████████.png         |
| 09-12-2022 | 7:48:12 |  | ████████████████████.png         |
| 09-12-2022 | 7:48:12 |  | ████████████████████_1.png       |
| 09-12-2022 | 7:48:13 |  | ████████████████████.pdf         |
| 09-12-2022 | 7:48:13 |  | ████████████████████.csv         |
| 09-12-2022 | 7:48:13 |  | ████████████████████.pdf         |

User 3

# Suspicious User Activity

# Suspicious User Activity – User1 - Suspicious User Activity – User1 - Use of personal emails to send corporate data

| Suspicious User Activity                                                                                                                                                                        |                                          |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------|
| <b>Potential Insider Risk.</b><br>1. User detected using his personal email to send highly sensitive ITAR marked data to unauthorized 3 <sup>rd</sup> parties.<br>2. Non-Compliance under ITAR. | <b>Technical control not implemented</b> | <b>High</b> |

Use of personal emails is a common occurrence in organisations but needs to be monitored as can lead data leak.

**Risk:** Use of personal emails to exfiltrate data out consistently reported as one of the key ways data is lost or stolen in organisations and needs to be monitored.

Email violation detail

Review Status :

Not Reviewed

Violation Date & Time :

[REDACTED] 10:26:10

Subject :

this is the file

User Name :

[REDACTED]

Email Domain Used :

www.mail.google.com

From :

[REDACTED]@gmail.com

Recipients :

TO: [REDACTED].com  
CC:  
BCC:

PC Name :

[REDACTED]

PC Serial Number :

[REDACTED]

Action :

Default

View complete email

Rules Violated

Defence Classified Information

Document Movements

General File Movement

Email Body/File Attachment

New Design Specs - Copy.docx

Detected content in email body / file attachment

| Word         | Context                                                                       |
|--------------|-------------------------------------------------------------------------------|
| CONFIDENTIAL | [REDACTED]<br>[REDACTED] private management confidential to [REDACTED] an fam |
| MANAGEMENT   | [REDACTED] ken<br>[REDACTED] systems private management confidential          |

# Suspicious User Activity – User2 – Data copied by user about to leave the organisation.

## Suspicious User Activity

### Potential Insider Risk.

1. User copied 1000s of design files also printed his CV during the same time.
2. There is evidence he has visited job sites (Indeed) and applied for Defence related engineering jobs around the same time when he copied the files.
3. The files have been copied on unencrypted USBs which most likely are personal.
4. He is also seen accessing and uploading files to personal Google Drive.
5. He belongs to the Defence User Group.

Technical control not implemented

High

**Risk.** Rapid and frequent transfer of large amounts of company data, the fact that the user is reviewing his CV and is applying for jobs are all tell-tale signs of a potential insider threat in progress.

**Risk.** The user has personal Dropbox installed meaning he has circumvented company policy.

| Print Event List for XXXXX using printer Canon-X53Series |                 |         |                 |            |            |                                        |
|----------------------------------------------------------|-----------------|---------|-----------------|------------|------------|----------------------------------------|
| User Name                                                | User Group Name | PC Name | File Name       | Event Date | Event Time | File Path                              |
| XXXXX                                                    | Client Group    | LAP2u82 | my cv 2022.docx | 02-12-2022 | 13:40:55   | c:\users\XXXX\Downloads\my cv 2022.doc |

Data copied to 2 distinct unencrypted USBs. Early Morning and on Weekend.

| Serial Number | Insertion Date/Time | Removal Date/Time   | Number Files          |
|---------------|---------------------|---------------------|-----------------------|
| 531455422     | 2022-12-18 22:20:16 | 2022-12-18 00:00:00 | <a href="#">9685</a>  |
| 531455422     | 2022-12-18 09:47:04 | 2022-12-18 10:20:16 | <a href="#">6622</a>  |
| 931222212     | 2022-12-25 08:31:19 | 2022-12-25 09:47:04 | <a href="#">15633</a> |
| 931222212     | 2022-12-25 19:35:33 | 2022-12-25 20:31:19 | <a href="#">8952</a>  |

# Suspicious User Activity- User 1

Applying for Job on Seek the next day.

| Date/Time           | Duration | Full URL                                    |
|---------------------|----------|---------------------------------------------|
| 2022/12/03 17:00:00 | 0:05:36  | au.indeed.com/[REDACTED]edabda9de58bfe0f2ff |
| 2022/12/03 17:30:00 | 0:18:41  | au.indeed.com/[REDACTED]                    |
| 2022/12/03 17:00:00 | 0:01:40  | au.indeed.com/job/[REDACTED]                |
| 2022/12/03 17:00:00 | 0:01:30  | au.indeed.com/job/[REDACTED]                |
| 2022/12/03 17:00:00 | 0:01:09  | au.indeed.com/job/[REDACTED]f               |
| 2022/12/03 17:00:00 | 0:01:10  | au.indeed.com/job/[REDACTED]f               |
| 2022/12/03 17:00:00 | 0:00:50  | au.indeed.com/job/[REDACTED]f               |
| 2022/12/03 17:00:00 | 0:00:44  | au.indeed.com/companies/[REDACTED]          |
| 2022/12/03 17:00:00 | 0:00:41  | au.indeed.com/companies/[REDACTED]          |
| 2022/12/03 17:00:00 | 0:00:36  | au.indeed.com/companies/[REDACTED]          |
| 2022/12/03 17:00:00 | 0:00:29  | au.indeed.com/job/[REDACTED]0               |
| 2022/12/03 17:00:00 | 0:00:26  | au.indeed.com/job/[REDACTED]6               |
| 2022/12/03 17:00:00 | 0:00:25  | au.indeed.com/job/[REDACTED]                |
| 2022/12/03 17:00:00 | 0:00:23  | au.indeed.com/job/[REDACTED]                |
| 2022/12/03 17:30:00 | 0:00:23  | au.indeed.com/job/[REDACTED]                |
| 2022/12/03 17:00:00 | 0:00:16  | au.indeed.com/job/[REDACTED]                |
| 2022/12/03 17:00:00 | 0:00:13  | au.indeed.com/job/[REDACTED]77              |
| 2022/12/03 17:00:00 | 0:00:11  | au.indeed.com/job/[REDACTED]b5              |
| 2022/12/03 17:00:00 | 0:00:11  | au.indeed.com/job/[REDACTED]                |
| 2022/12/03 17:30:00 | 0:00:11  | au.indeed.com/job/[REDACTED]                |
| 2022/12/03 17:00:00 | 0:00:06  | au.indeed.com/job/[REDACTED]f               |
| 2022/12/09 17:30:00 | 0:00:06  | au.indeed.com/job/[REDACTED]2               |
| 2022/12/03 17:00:00 | 0:00:04  | au.indeed.com/job/[REDACTED]                |
| 2022/12/03 17:30:00 | 0:00:04  | au.indeed.com/job/[REDACTED]6               |
| 2022/12/03 17:00:00 | 0:00:03  | au.indeed.com/job/[REDACTED]                |

# Email Analysis

Covers both Corporate and Personal Email transactions.

# Forwarding emails to personal emails

## Corporate Email Analysis

**Corporate emails forwarded to own personal emails.**  
Email detected being forwarded to user own personal email.

**Technical control  
not implemented**

**Medium**

**Visibility of email forwards.** Visibility of what files have been forwarded by users to personal and free emails to ensure they are accounted for.

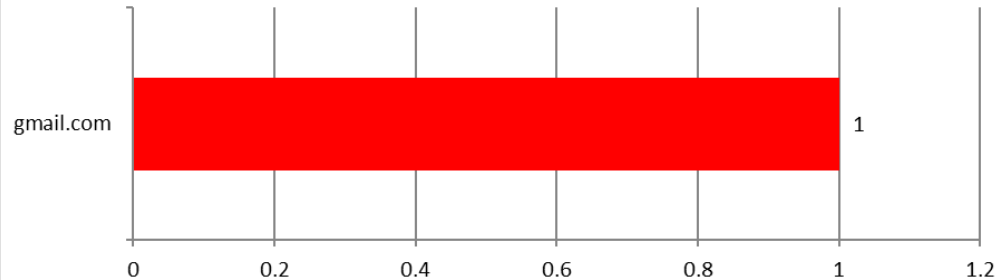
**Technical control  
not implemented**

**High**

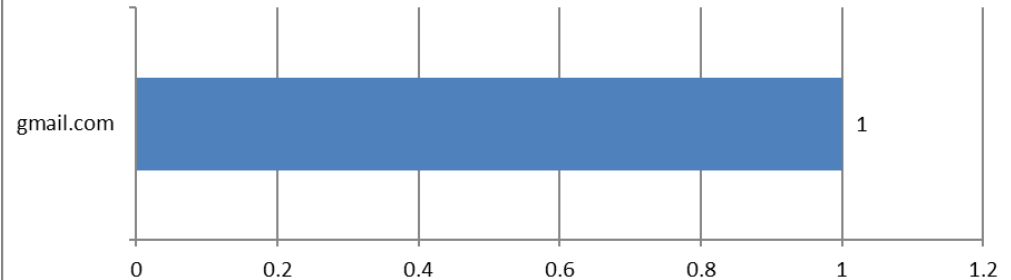
Forwarding emails to personal and other free emails is a common cause of leakage and non-compliance

**Risk:** Forwarding corporate information to personal emails leads to information creep. The action needs to be checked in the event sensitive information is forwarded to free emails.

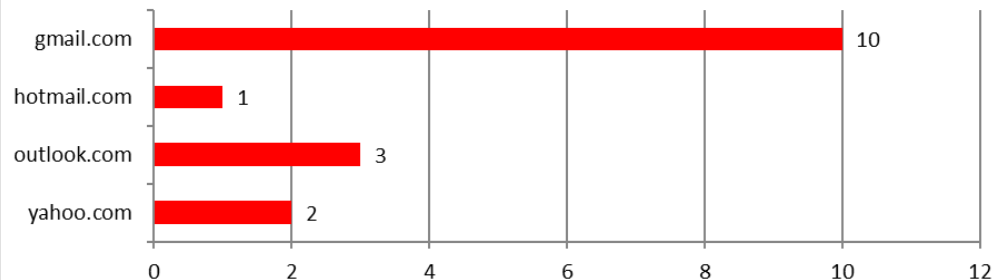
### Users With Emails To Own Free Email Address



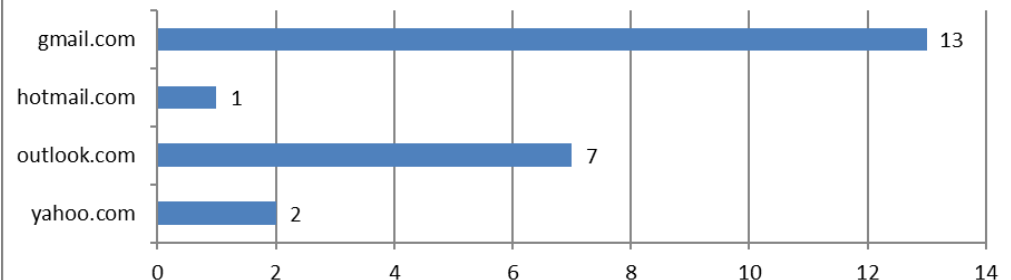
### Emails To Actual Own Personal Address



### Users With Emails To Potential Email Address



### Emails To Potential Own Personal Address

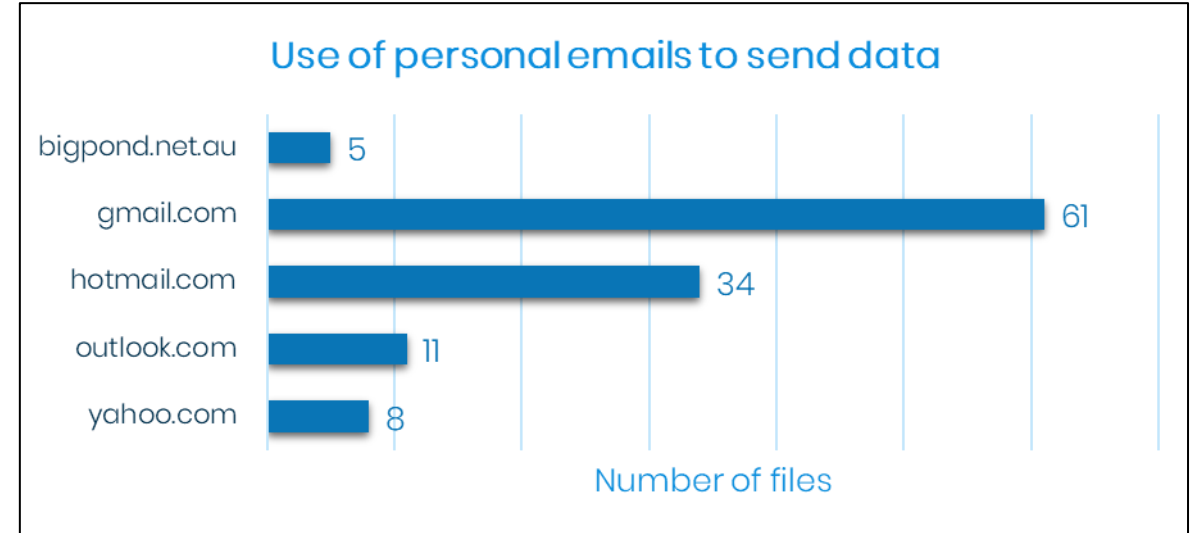


# Use of personal emails to send data

| Use of Personal Emails                                                                                                            |                                   |      |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------|
| <b>Use of Personal emails to send corporate data detected.</b> Personal emails have been used to send corporate data.             | Technical control not implemented | High |
| <b>Visibility of Personal Email Use.</b> Visibility is required to ensure company data is not being sent out via personal emails. | Technical control not implemented | High |

Use of personal emails is a common occurrence in organisations but needs to be monitored as can lead to data leaks.

**Risk:** Use of personal emails to exfiltrate data out consistently reported as one of the key ways data is lost or stolen in organisations and needs to be monitored.



# Use of Non Organisational Unauthorised Applications

Non-Compliance of 2 of the ES8 Controls.

1. Restrict administrative privileges
2. Application control

# Installation and Use of Non-organisational applications

| Data transfer using non-corporate applications                                                                                                                                                                                                  |                                   |      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------|
| <b>Technical Control Circumvented.</b> The users seem to have found a way to install non-organisational applications.<br><br><b>Non-Compliance of 2 of the ES8 Controls.</b><br>1. Restrict administrative privileges<br>2. Application control | Failed Technical Control          | High |
| <b>Visibility of Application Use.</b> Visibility of what applications are being used by users.                                                                                                                                                  | Technical control not implemented | High |

The use of personal applications without proper authorization and vetting may be for legitimate reasons, but there are significant risks involved.

**Risk.** Standard users should not have admin rights to install applications. It can result in malware infection and highlights that the current controls are failing to implement 2 of the ES8 Controls.

1. Restrict administrative privileges
2. Application control.

| Software Name | Vendor            | Number of PCs with Software Present | Number of PCs with Software Usage | Total Usage Duration |
|---------------|-------------------|-------------------------------------|-----------------------------------|----------------------|
| MESSENGER.EXE | Facebook Inc.     | 5                                   | 3                                 | 1:15:00              |
| TELEGRAM.EXE  | Telegram          | 5                                   | 2                                 | 0:41:40              |
| WHATSAPP.EXE  | WhatsApp          | 6                                   | 2                                 | 0:17:30              |
| FILEZILLA.EXE | FileZilla Project | 1                                   | 1                                 | 0:08:41              |
| DROPBOX.EXE   | Dropbox, Inc.     | 8                                   |                                   |                      |
| OPERA.EXE     | Opera Software    | 2                                   |                                   |                      |

# Data transfer using Non Corporate Data sharing APPs and Websites

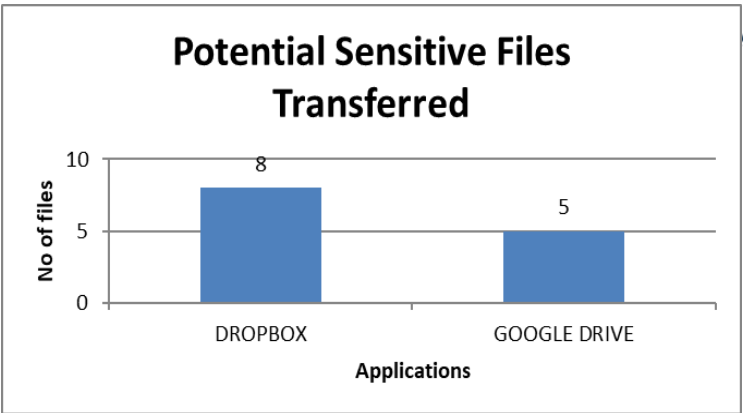
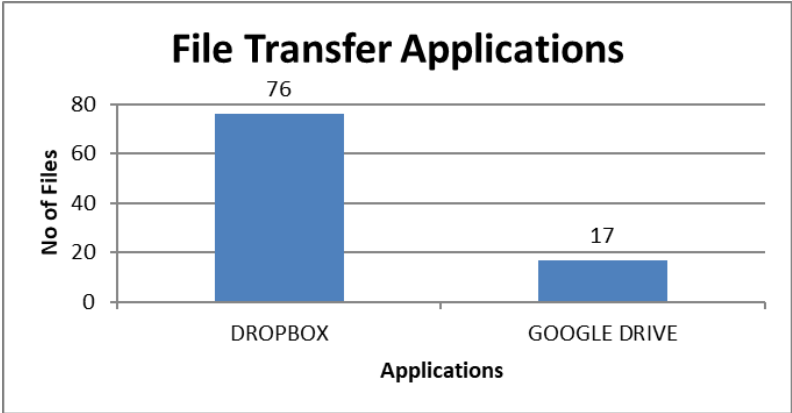
# Data transfer using Non-Org applications

| Data transfer using non-corporate applications                                                                                                       |                                   |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------|
| <b>Risky Transfer Application Use.</b> 6 users detected using Dropbox or Google Drive to transfer files. Transfers include potential sensitive data. | Failed Technical Control          | High |
| <b>Visibility of transfers.</b> Visibility of sensitive data transferred using external media                                                        | Technical control not implemented | High |

The use of personal cloud services and applications may be for legitimate reasons, but there are significant risks involved.

**Risk.** Unauthorized access by former staff members. Information stored in personal cloud account remains with its user after he leaves a company and therefore can result in a breach as per NDB Scheme.

**Risk.** Applications like Dropbox, OneDrive, and Google Drive sync files to any device where a user is logged into these applications. This may include their personal devices or, even worse, those of a different company, which could result in the loss of sensitive information.



| User Name | User Group   | Total Events          |
|-----------|--------------|-----------------------|
| xxxxxxx   | Client Group | <a href="#">34443</a> |
| xxxxxxx   | Client Group | <a href="#">1722</a>  |
| xxxxxxx   | Client Group | <a href="#">1428</a>  |
| xxxxxxx   | Client Group | <a href="#">17</a>    |

|            |          |         |                                                 |
|------------|----------|---------|-------------------------------------------------|
| 29-11-2022 | 14:03:28 | DROPBOX | 1231212.docx                                    |
| 29-11-2022 | 14:03:28 | DROPBOX | 1-product comparison-latest- jun 2018 copy.xlsx |
| 29-11-2022 | 14:03:28 | DROPBOX | 1-product comparison-latest- jun 2018.xlsx      |
| 29-11-2022 | 14:03:29 | DROPBOX | 1231212_00.docx                                 |
| 29-11-2022 | 14:03:29 | DROPBOX | 1231212_00_11.docx                              |
| 29-11-2022 | 14:03:29 | DROPBOX | amex2222_3.xls                                  |
| 29-11-2022 | 14:03:29 | DROPBOX | az-100.docx                                     |
| 29-11-2022 | 14:03:30 | DROPBOX | capture.png                                     |
| 29-11-2022 | 14:03:30 | DROPBOX | claim - copy.xls                                |
| 29-11-2022 | 14:03:43 | DROPBOX | client4.4.0.10 - lc-temora.msi                  |
| 29-11-2022 | 14:03:56 | DROPBOX | contract form.doc                               |
| 29-11-2022 | 14:03:56 | DROPBOX | creditcard.docx                                 |
| 29-11-2022 | 14:03:57 | DROPBOX | customer info.xlsx                              |
| 29-11-2022 | 14:03:57 | DROPBOX | customer_info.docx                              |
| 29-11-2022 | 14:03:58 | DROPBOX | customer_offer letter.docx                      |

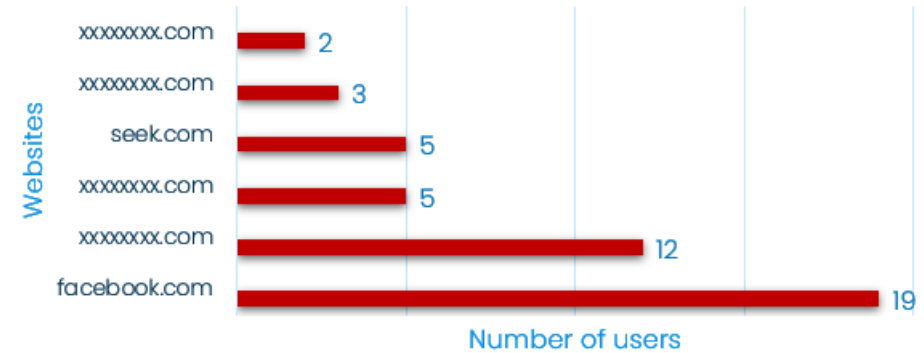
# Data transfer using Non-organisational websites

| Data transfer using non-corporate applications                                                              |                                   |      |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------|------|
| <b>Risky website Use.</b> 19 users detected using Facebook and potentially transferring data.               | Technical control not implemented | High |
| <b>Visibility of transfers.</b> Visibility of sensitive data transferred using APPs and encrypted websites. | Technical control not implemented | High |

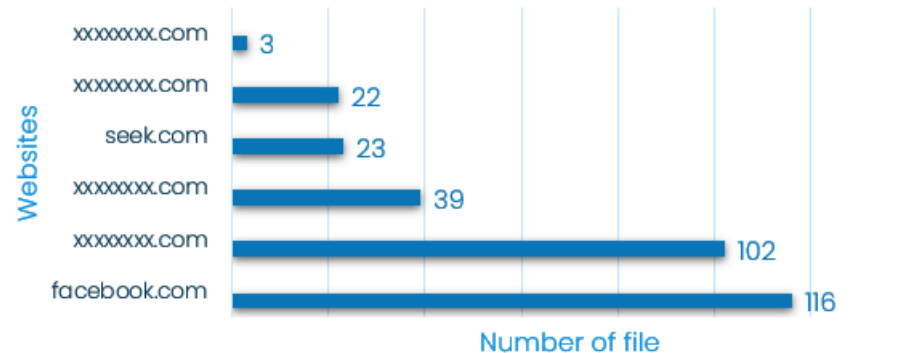
Transferring of files to non-corporate websites may be for legitimate reasons, but there are significant risks involved.

**Risk.** Can result in a breach if sensitive or PII data is uploaded to non-corporate websites either accidentally or due to malicious intent.

Number of users who transferred to top 6 non-corporate domains



Number of files transferred to top 6 non-corporate domains



# Printing Analysis

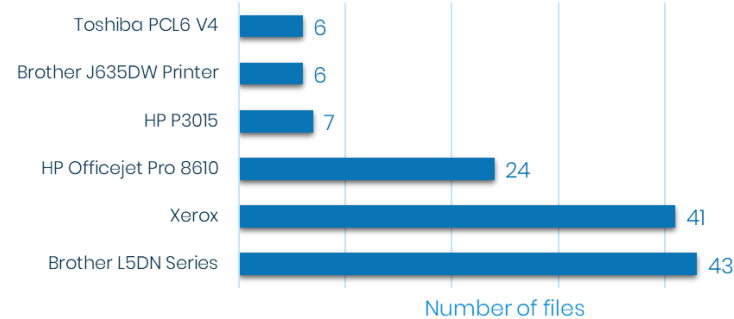
# Printing of Potential Sensitive Information

| Printing of Sensitive Data                                                                                                                                 |                                          |               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------|
| <b>Printing of potential sensitive data.</b><br>Printing of sensitive data was observed.                                                                   | <b>Technical control not implemented</b> | <b>Medium</b> |
| <b>Printing use personal Printers.</b> As users are allowed to work from home there is risk of files being printed using home printers.                    | <b>Technical control not implemented</b> | <b>Medium</b> |
| <b>Visibility of Printing.</b> Visibility of what files have been printed either via organisational or personal printers to ensure they are accounted for. | <b>Technical control not implemented</b> | <b>Medium</b> |

The use of these printers may be for legitimate reasons but can result in a breach.

**Risk.** According to ACSC Loss of printed information is a common occurrence leading to a data breach. As such printing of material needs to be monitored and controlled. Users should be made responsible for the security of printed materials. All printing events need to be monitored.

Top 6 Printers – Potential Sensitive File Printed



| Printer Name                        | Total Events |
|-------------------------------------|--------------|
| \\rbcmon02\ -Office                 | 25           |
| \\RBCPRN01\ -Office                 | 22           |
| \\rbcprn01\ Office                  | 19           |
| \\RBCPRN01\ -Office                 | 12           |
| D-Accounts                          | 6            |
| Microsoft Print to PDF              | 5            |
| \\rbcmon02\ -Office2                | 5            |
| \\rbcprn01\ -Office                 | 5            |
| Microsoft Print to PDF              | 4            |
| \\rbcprn01\ -Manager Office         | 3            |
| Canon TS3300 series                 | 3            |
| OneNote for Windows 10              | 2            |
| Adobe PDF                           | 2            |
| \\RBCPRN01\ -Office                 | 2            |
| I Block Lv2 Toshiba                 | 2            |
| -Admin                              | 2            |
| HP8A771D (HP Officejet Pro 6830)    | 2            |
| \\rbcprn01\ -Office                 | 1            |
| Adobe PDF                           | 1            |
| HPBBF063 (HP OfficeJet Pro 8710)    | 1            |
| \\RBCPRN01\ -Office                 | 1            |
|                                     | 1            |
| HP000756 (HP Officejet 6600)        | 1            |
| Brother HL-1110 series              | 1            |
| Adobe PDF                           | 1            |
| Brother MFC-L3750CDW series Printer | 1            |
| \\RBCPRN01\ -Office                 | 1            |
| \\rbcprn01\ -Office                 | 1            |
| Canon MG6200 series Printer XPS     | 1            |

# Access of files

# Access of files

| Access of information                                                                         |             |         |
|-----------------------------------------------------------------------------------------------|-------------|---------|
| <b>Authorised Access of sensitive Information.</b> Ensuring authorised users can access files | Implemented | No Risk |
| <b>Access Visibility.</b> Visibility of who is accessing what files                           | Implemented | No Risk |

The company has visibility and means to validate if authorised users are accessing sensitive data.

DLP File Access Incidents by Rule Name

| Rule Name                      | Number of           | Number of Files       |
|--------------------------------|---------------------|-----------------------|
| Defence Classified Information | <a href="#">79</a>  | <a href="#">1086</a>  |
| Document Access                | <a href="#">146</a> | <a href="#">19567</a> |

| File Name                             | User Name | Date       | Time     | File Path                                                                      |
|---------------------------------------|-----------|------------|----------|--------------------------------------------------------------------------------|
| mp-23 project brief.doc               |           | 29/11/2022 | 12:42:56 | c:\users\User\document\Client Profile\mp-23 project brief.doc                  |
| ac_id_74 - signed.docx                |           | 29/11/2022 | 15:21:49 | c:\users\User\document\Client Profile\ac_id_74 - signed.docx                   |
| security snippets nov 2022.pdf        |           | 29/11/2022 | 9:36:52  | c:\users\User\document\Client Profile\security snippets nov 2022.pdf           |
| agreementreconciliation.pdf           |           | 29/11/2022 | 11:55:43 | c:\users\User\document\Client Profile\agreementreconciliation.pdf              |
| 202208_client.xlsx                    |           | 29/11/2022 | 10:13:53 | c:\users\User\document\Client Profile\202208_client.xlsx                       |
| performance report.pdf                |           | 29/11/2022 | 11:21:31 | c:\users\User\downloads\performance report.pdf                                 |
| performance report (1).pdf            |           | 29/11/2022 | 11:21:39 | c:\users\User\downloads\performance report (1).pdf                             |
| protect 1st work package costing.xlsx |           | 6/12/2022  | 13:29:50 | c:\users\admin\desktop\demos\project f20\protect 1st work package costing.xlsx |

# RECOMMENDATIONS TO REDUCE RISKS

1. Users need to be educated and informed regarding their risky actions. There is a need to conduct user training on the identified risks. Moving forward, department heads can be passed reports about risky actions of their staff to ensure compliance on an ongoing basis. This also ensures better security as movement of information is reviewed by users who understand its sensitivity and use.
2. Use of network shared drives should be encouraged as a means for sharing files internally, and use of USB storage should be minimised. In case movement of information is required using USBs, DLP and encryption software should be used to provide visibility and protection of files.
3. Sensitive information should be encrypted when being sent to trusted 3rd parties or copied to removable USB storage or cloud applications. This ensures that, even in the case of loss or theft, sensitive information is not compromised, and fines or reputational loss can be avoided.
4. Disk or file-based encryption should be considered to protect data stored locally on devices. Microsoft's Bitlocker is a good option.
5. Access of sensitive files in cloud drives should be restricted to company devices and users only. There are multiple ways to implement this. Some examples include implementing CASB or file-based encryption.
6. Use of personal cloud drives and uploads to websites should be closely monitored. Access to them should be given only on a strong need basis.
7. Moving sensitive information via emails is unavoidable. Where required, it should always be zipped and password protected. A better approach is to maintain the files encrypted so that only authorised users can have access to the data in case of a breach.
8. Forwarding and sending sensitive corporate information to personal and 3<sup>rd</sup> party free accounts should be monitored. Business dealing using free email user accounts can make investigation tough in case of any litigation.
9. Use of non-corporate networks and printers should be monitored. Preventing users from using non-corporate network can greatly impact productivity, so a better approach would be to use specialised security software to monitor devices when connecting from home or using personal printers.
10. Users should be encouraged and reminded to seek advice from IT departments before installing and using non-corporate applications. Specialised asset management software can provide the visibility of use if they do not comply and can block the applications from running.

GuardWare offers several products designed to keep your data safe and can help implement the recommendations in this report.



#### Contact Information

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