



# Security vs. Privacy?

## Analysis of Privacy Policies of IT Security Software

# ABOUT AV-TEST



The AV-TEST Institute in Magdeburg

# ABOUT AV-TEST



- Tests of security products regarding their protection performance
  - Anti-Virus software
  - Soft-/Hardware
  - Cloud Services
- Certification and awarding of outstanding products

- Find privacy information!
  - Online (19/27)
  - During installation (6/27)

→ discrepancy: 2/27 without information about privacy topics

- And have the necessary skills...!
  - English version used
  - Flesch-Kincaid Reading Ease score
    - Values from 11 to 55 (22 to 11 school years)
    - Average of 38 (14 school years)



- Hardware information
  - Device brand and model (11/25)
- Software information
  - Installed software packages (15/25)
- Licensing
  - Product version (13/25)
  - License number (10/25)
  - Product-ID (10/25)
  - Installation path (5/25)



# PRE-USAGE: REGISTRATION



## 勞動部勞動力發展署北基宜花金馬分署 基隆就業中心現場徵才活動求職登記簡表

活動日期：\_\_\_\_\_年\_\_\_\_\_月\_\_\_\_\_日

- Personal information

- Contact data

求職者姓名 (15/25)	出生日期		年	月	日	歲
身分證號碼 (17/25)	性別		<input type="checkbox"/> 男	<input type="checkbox"/> 女		
聯絡電話 (12/25)	手機					
聯絡地址 (14/25)						
學歷	<input type="checkbox"/> 博士 <input type="checkbox"/> 碩士 <input type="checkbox"/> 大學 <input type="checkbox"/> 專科 <input type="checkbox"/> 高職 <input type="checkbox"/> 高中 <input type="checkbox"/> 國中 <input type="checkbox"/> 國小 <input type="checkbox"/> 其他					
學校名稱	科系所					
希望工作項目	1	2	3			
希望工作地點	1	2	3			
希望工作時間	<input type="checkbox"/> 日班 <input type="checkbox"/> 夜班 <input type="checkbox"/> 輪班制 <input type="checkbox"/> 假日工作 <input type="checkbox"/> 工讀 <input type="checkbox"/> 不拘					
駕照種類	<input type="checkbox"/> 機車 <input type="checkbox"/> 小客車 <input type="checkbox"/> 大客車		語文能力 <input type="checkbox"/> 台語 <input type="checkbox"/> 英語 <input type="checkbox"/> 其他			
個案區分	<input type="checkbox"/> 一般 <input type="checkbox"/> 身心障礙者(障別： <input type="checkbox"/> 輕(中) <input type="checkbox"/> 重度) <input type="checkbox"/> 負擔家計者 <input type="checkbox"/> 原住民 <input type="checkbox"/> 生活扶助戶 <input type="checkbox"/> 更生受保護人 <input type="checkbox"/> 外籍配偶 <input type="checkbox"/> 大陸地區配偶					
*本表格同意經基隆就業中心辦理就業服務系統登記，並於徵才活動後提供就業服務。 *敬請詳細填寫以上表格，並確認所提供之資料均屬實。						
						簽名：_____

## USAGE: SYSTEM SCANS

- Scanned files

- File hashes (13/25)
- Detection name (7/25)
- Detection path (7/25)
- Registry information, Certifications (1/25)
- System libraries, file size (2/25)

- Furthermore...

- Suspicious executables (15/25)
  - Suspicious documents (1/25)
- Anonymisation (1/25)

## USAGE: THREAT MONITORING

- General computer usage (10/25)
  - Memory (6/25) and battery status (3/25)
  - Running processes (8/25)
  - System error logs (4/25)
  - Login name (4/25)
  
- Identifier
  - Device ID (10/25)
  - MAC Address (5/25)
  - Computer network name (5/25)
  - SIM number (2/25)





## USAGE: WEB PROTECTION / COMMUNICATION

### ■ Communication

- Emails (4/25)
  - Anonymization (1/25)
- Contacts (1/25)
- Social media (5/25)
- Chat accounts and logs (1/25)

### ■ Online activity (14/25)

- Search queries (5/25)
- Click streams (3/25)

### ■ Furthermore...

- Pictures and photos (4/25)
- Audio and video recordings (1/25)
- Biometric data (1/25)

## USAGE: ID / THEFT PROTECTION

- Personal identifiers
  - ID card number (1/25)
  - Social security number (1/25)
  - Driving license number (1/25)
  - (Credit card/bank account data)
  
- Access to
  - Desktop content (1/25)
  - Camera (1/25)

## BEYOND DATA COLLECTION...

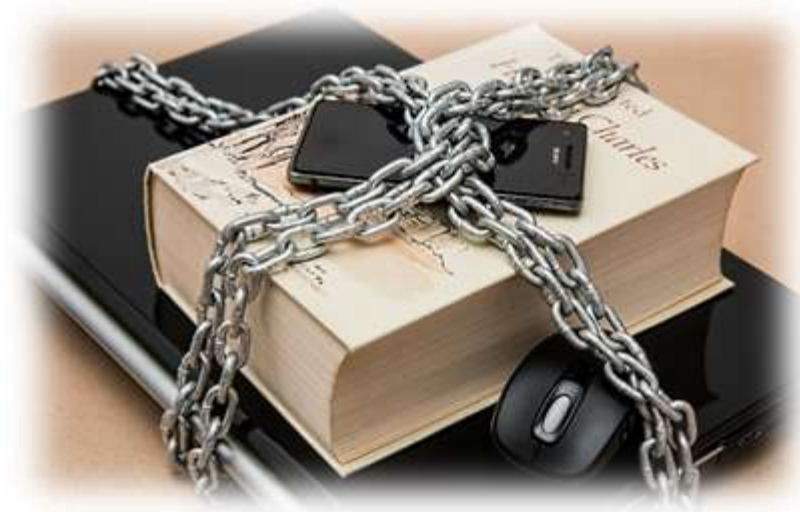
- Storage
  - Retention periods hardly covered
  
- Transfer
  - Encryption (11/25), naming valid technique (7/25)
  - References to Safe Harbor (4/25)
  
- Data processing
  - Data sharing/combination
  - Processing techniques and purposes
  - Anonymization



Image source: <http://de.iceage.wikia.com/wiki/Scrat>

## GENERAL REMARKS

- Differing document quality
  - Completeness, comprehensibility, clarity
  - Validity dates from 2013-2016
  - Language versions do not always match
  
- Usage of design elements
  - Videos, graphical novels, summaries
  
- Limitations of this evaluation
  - User perspective
  - Assessment of available information
  - Interpretation of ambiguities



# OPEN QUESTIONS

- Examination of software
  - Registration procedure
  - Opt-out mechanisms
  - Add-ons/PUA
  
- Dialogue with manufacturers
  - Storage modalities, anonymization
  - Data processing, Profiling
  - Data sharing





@avtestorg (English) & @avtestde (German)



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Thank you for your attention!

