Sun City Computer Club

Cyber Security SIG

September 16, 2021

Questions, Comments, Suggestions welcomed at any time

Even Now

- Audio recording of this session as MP4 file
- Audio recording available at link shown above

Audio Recording In Progress

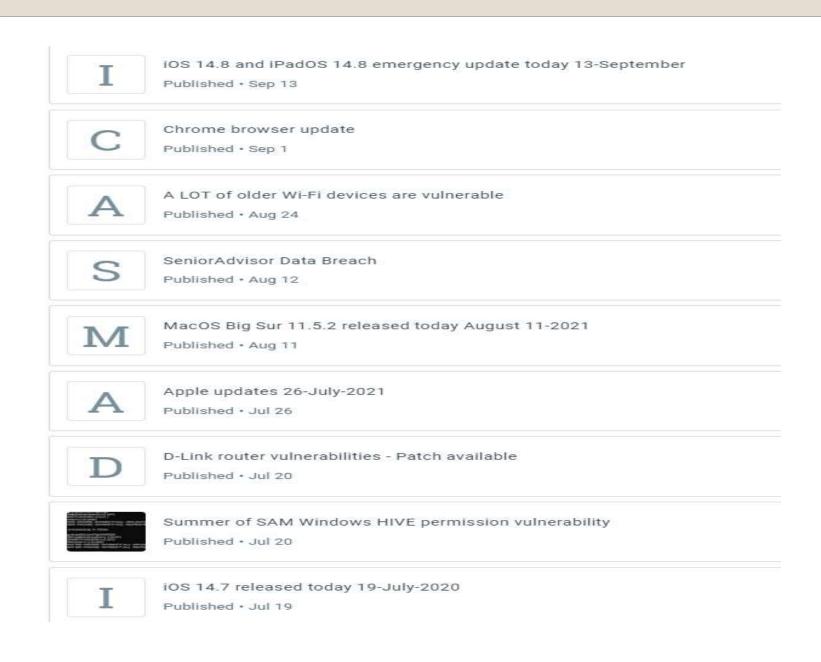
SIG attendees are required to be members of the chartered club sponsoring that SIG.
Sun City Community Association By-law

Ever want to be a presenter??

Presenter???

- iOS 14.8 iPadOS 14.8 macOS 11.6 Big Sur and Catalina WatchOS 7.6.2
- September 13
- CoreGraphics Citizen Lab Pegasus
- WebKit
- Future iOS 14 updates

Apple Updates



- Azure Open Management Infrastructure Patch Tuesday Exchange vulnerability x4 MSHTML Active X WEB scripts
- Infrastructure & Trust
- TTEC Customer Support & sales
 Band of America, Bust Buy, Dish Network, USAA,
 Verizon, ...
 Ransomware Hostage ware?

Current Issues

www.DMAChoice.org
 nonprofit to limit junk snail mail
 www.directmail.com

National Do Not Mail

www.OptOutPrescreen.com

Opt Out Opt In Offers of Insurance or Credit

MetaBank Debit card CARES act

Check is in the Mail - just a small fee

Postal Mail



Updates available

Last checked: Today, 12:11 PM

Security Intelligence Update for Microsoft Defender Antivirus - KB2267602 (Version 1.349.737.0)

Status: Pending install

Windows Malicious Software Removal Tool x64 - v5.93 (KB890830)

Status: Installing - 0%

2021-09 Cumulative Update for Windows 10 Version 21H1 for x64-based Systems (KB5005565)

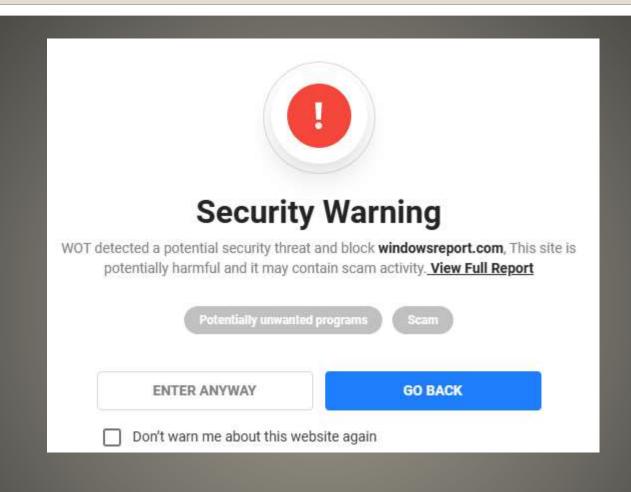
Status: Downloading - 100%

View ontional undates



Microsoft Patch Tuesday





PC Health Check









Password removed

You have increased the security of your account and improved your sign-in experience by removing your password.

Done

Microsoft Account
 AT Microsoft
 15-September-2021
 Microsoft Authenticator App
 Windows Hello
 Security key
 SMS code

Passwordless Microsoft Account



Windows Hello Face

This option is currently unavailable—click to learn more



Windows Hello Fingerprint

This option is currently unavailable—click to learn more



Windows Hello PIN

Sign in with a PIN (Recommended)



Security Key

Sign in with a physical security key



Password

Sign in with your account's password



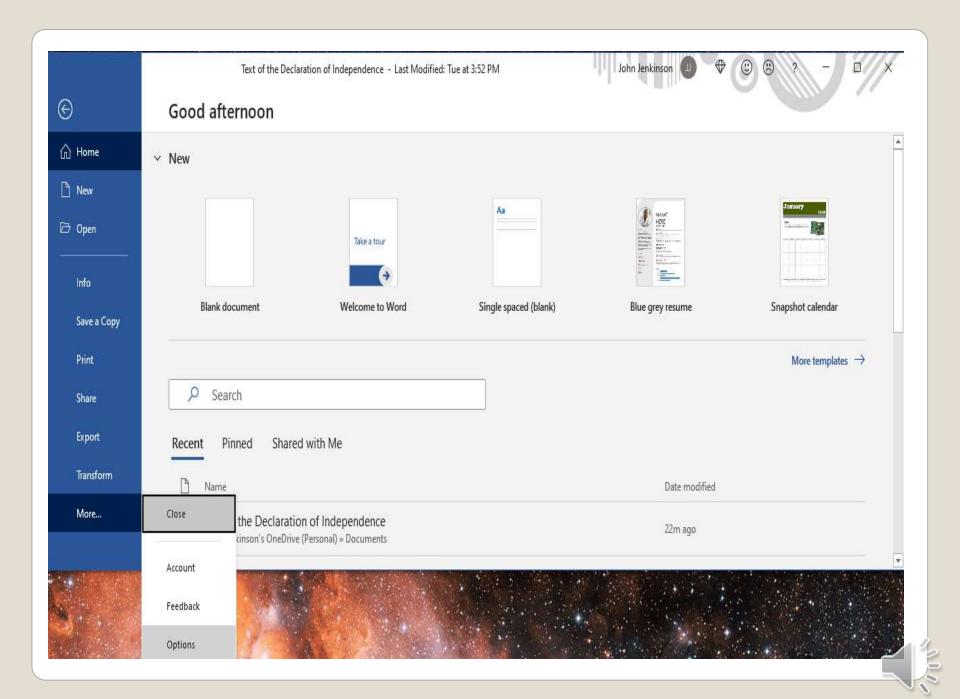
Picture Password

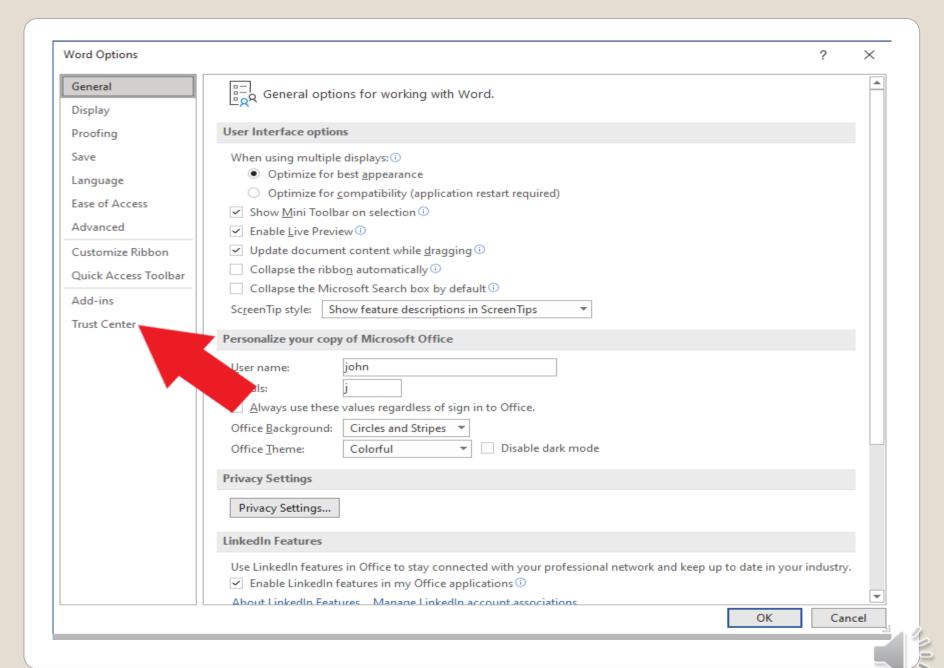
Swipe and tap your favorite photo to unlock your device

Windows Hello

- 579 attacks/second Password brute force
- Walgreens Covid Test result
 Name, Birthdate, Gender, Phone number,
 Home address, email address
- 60 million records
 - Fitbit
 - GoogleFit
 - MapMyFitness
 - Microsoft
 - Sony Lifelog
 - Strava
 - Apple HealthKit
 - Android Sensor
 - S Health

Current Issues





Word Options ? X

General

Display

Proofing

Save

Language

Ease of Access

Advanced

Customize Ribbon

Quick Access Toolbar

Add-ins

Trust Center



Help keep your documents safe and your computer secure and healthy.

Security & more

Visit Office.com to learn more about protecting your privacy and security.

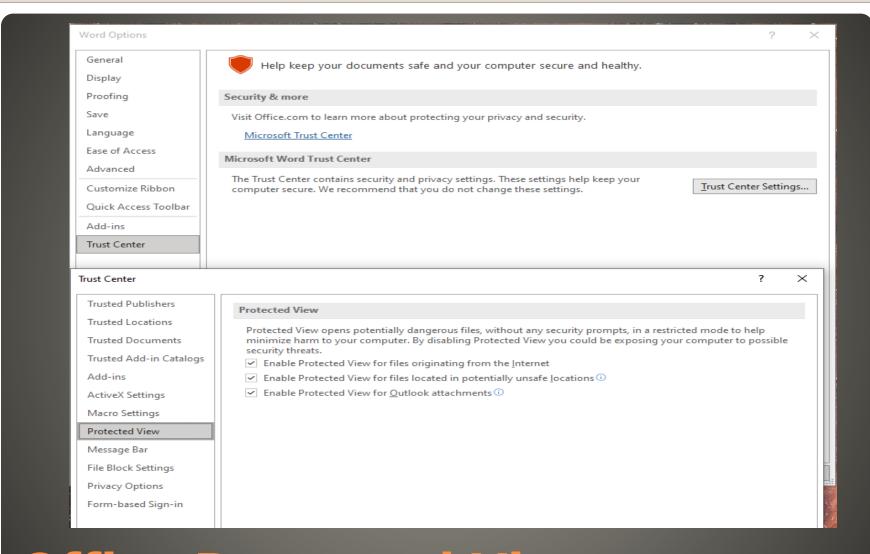
Microsoft Trust Center

Microsoft Word Trust Center

The Trust Center contains security and privacy settings. These settings help keep your computer secure. We recommend that you do not change these settings.

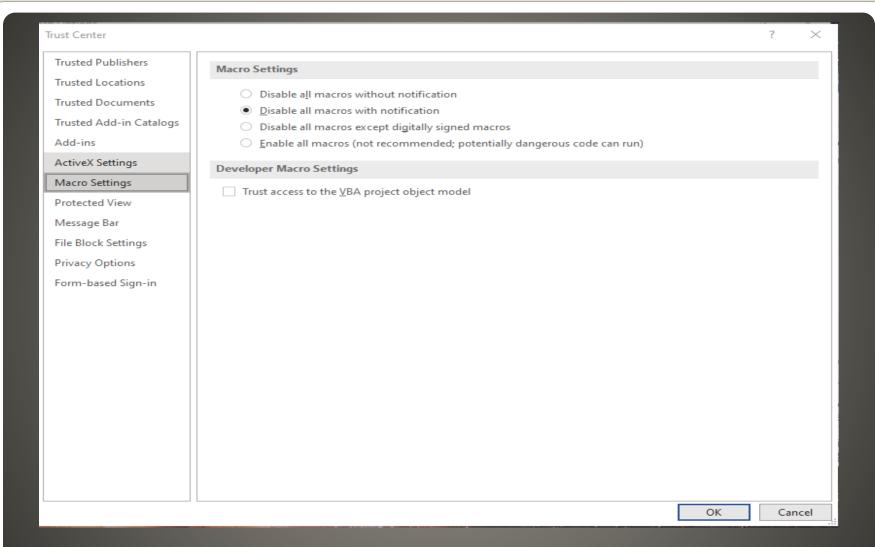
Trust Center Settings...





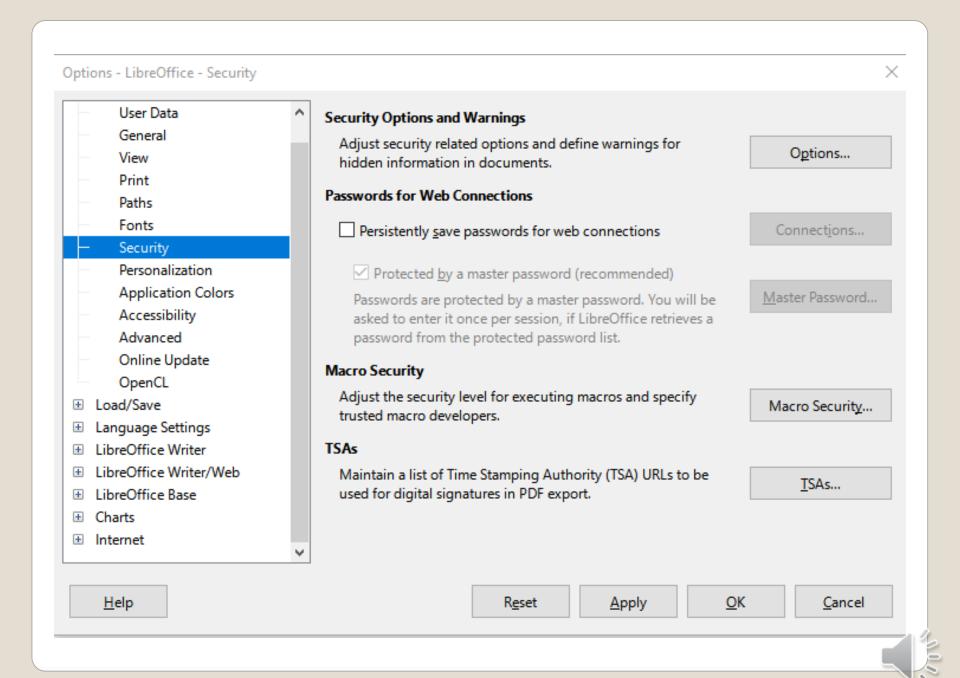
Office Protected View





Macros Disable





Macro Security X
Security Level Trusted Sources
Very high. Only macros from trusted file locations are allowed to run. All other macros, regardless whether signed or not, are disabled.
H <u>ig</u> h. Only signed macros from trusted sources are allowed to run. Unsigned macros are disabled.
O Medium. Confirmation required before executing macros from untrusted sources.
Low (not recommended). All macros will be executed without confirmation. Use this setting only if you are certain that all documents that will be opened are safe.
Help Reset OK Cancel



- Office Macros
- Internet Explorer
 MSHTML (IE) ActiveX control
 Trident proprietary browser engine

CVE-2021-40444

- Protected view bypass
 Containers zip archives
 ISO files
 RTF Rich Text Format
- Protections / Macros per user
- Protections / Macros updates & upgrades
- Set & Forget

Office Protections



Apple Photos 'Data Linked to You'

Analytics App Functionality Identifiers User ID Device ID User Content Other User Conter Identifiers User ID Device ID Device ID

Google Photos Data Linked to You'

Developer's Advertising or Marketing	Product Personalisation	App Functionality
Location Coarse Location	▼ Location Precise Location	Purchases Purchase History
	Coarse Location (2) Contacts	Financial Info
Analytics	Contacts	✓ Location
Purchases	User Content Photos or Videos	Precise Location Coarse Location
Purchase History	Other User Content	Contact Info
▼ Location	Search History	Physical Address
Coarse Location	Search History	Email Address
Contact Info	Identifiers	Name Phone Number
Email Address	User ID	Contacts
User Content	Device ID	Contacts
Photos or Videos Customer Support Other User Content	Usage Data Product Interaction	User Content
Search History		Photos or Videos Customer Support Other User Content
Search History		Search History
■ Identifiers		Search History
User ID Device ID		a Identifiers
ull Usage Data		User ID
Product Interaction		Device ID
☼ Diagnostics		III Usage Data
Performance Data Other Diagnostic Data		Product Interaction Diagnostics
Other Data		Performance Data
Other Data Types		Other Diagnostic Data
		Other Data
		Other Data Types

Servinge.



- Legal implications of garbage discard
- HEB Pharmacy plastic bags
- Shred any/all PII overkill?
- Bulk shredding Sun City

gigo Garbage In Garbage Out

- Multiple eMail addresses and providers
- Multiple browsers
- Multiple Identities
- Multiple fake lives
 Birthdates, first cars, best pet, ...
- Multiple cell phones

Fit for Purpose

Multiple

- Verification
- Spoofing changing true IDentity for fake/trusted
- US National Identifier Social Security Number Legal to Opt out providing SSN
- Growing use of eMail address as IDentity
- Track and sustain eMail addresses
- Dwindling pool of non-eMail usernames
- Disposable eMail addresses
- Gmail + eMail john+ebay@gmail.com
- eMail skeleton key to digital life

IDentity

- Phishing
 scam duping/fooling to reveal personal or
 confidential information for illicit purposes
- Spear Phishing
- Smishing
- Vishing

Phishing

Great to hear from you, I need you to get a Apple iTunes gift cards for a friend who is down with cancer of the Liver, it's his birthday today and I promised to get it for him, but I can't do this now because I'm currently out of town and all my effort purchasing it online proved abortive. Can you get it from any store around you for me? I'll reimburse you once I return. Please let me know if you can handle this so I can tell you the amount and how to get them to me.

Sent from Mail for Windows

How are you doing? Hope you keeping safe?

Can i ask you for a favor?

Sent from Mail for Windows

Phishing

- Do Not click on links
- Links were made for clicking
- ALERT when asked for credentials backup pause investigate
- Sense of urgency
- Sense of familiarity
- There is a problem with this site's certificate
- Information gives no indication of being stolen

Links

- www.ftc.gov
- ReportFraud.ftc.gov
- IdentityTheft.gov

- Length beats strength
- Passphrase hint
- Password manager
- Financial hint
- Every passphrase/password unique Credential stuffing
- Password rules weaken passwords (must have mixed case, number, special)
- Phishing look-a-like steal credentials
- keyloggers

Passphrase

- Separate financial passphrases
- Password managers for digital legacy
- Passphrases stored in browsers
 browser takeover save this credit card?
- Password manager browser integration
- Function, security, usability pick any 2
- Dictionary attack
- Social media attack
- Brute Force
- Big Data

Passphrases

- Hash
- Salt
- Hash one-way cryptographic function Any length input Fixed length output identical input => identical hash slight perturbation in input => drastic change in hash Rainbow tables Salt + hash => more secure STRONG passphrase + maximum encryption for naught if password given away or keylogger Celebrity photos Jeff Bezos DNC

Passwords

- Get a replacement password, PIN, etc.
- Biometrics more permanent
- Kids snap sleeping parent to use smart phone
- HIIDE
- China social score

Biometrics

- Authentication
 process or action showing something to
 be true, authentic, valid, genuine
- Factors
 something you know passphrase
 something you possess phone, key
 something you are biometrics
 something you can do typing style
 possess smart device SMS message
 Authenticator
 security key

Multi Factor authentication

- Tune & adjust profile & settings
- Separate form and function
- Internet birthdate

Social Media

- eMail cost
- Generate eMail addresses

 a@gmail.com, aa@gmail.com, ...
- eMail lists for purchase
- uNsubscribe
- Abandon eMail accounts consider keeping, monitoring, inventory
- Gmail account+key = who's responsible
- Temporary email => add and remove
- Text only reader

Spam, Robocalls, junk mail, text, ...

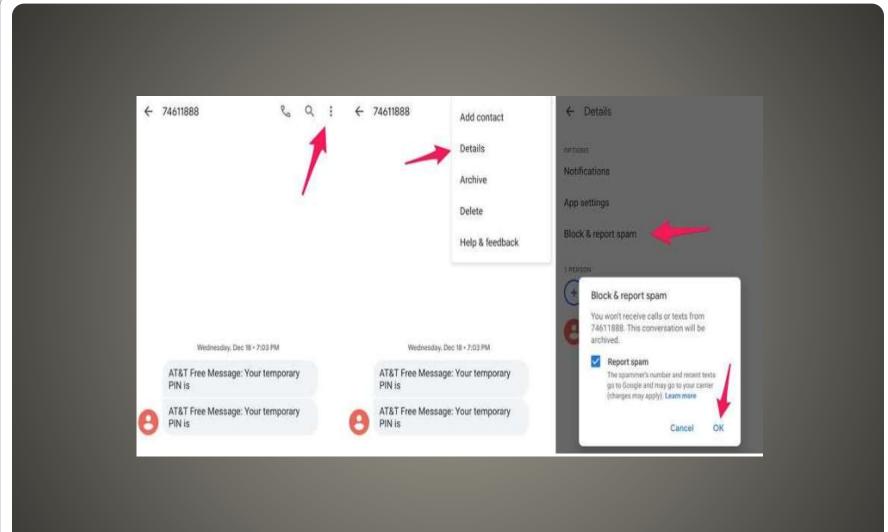
- Smart Phones
- DO NOT click Open links
- Maby STOP
- Maby not
- Forward "SPAM" 7726

Hey Jason! Your 1800Flowers order has been shipped. Once it's delivered, we'll send you a delivery confirmation message. To opt out, text STOP http://bit.ly/2tw54

https://consumercomplaints.fcc.gov/hc/en-us

SPAM Text, Voice Mail?







- Multiple email providers/addresses
- Name at dot domain Donald[at]Disney[.]com
- Privacy policy
- "get notices?"
- Breach subject?
- Australia

SPAM avoidance



SPAM

- Sender Policy Framework
- eMail server
- eMail client
- Multiple servers Gmail vs. Proton mail Location and privacy policies
- 45% 73% Corporate targets higher %

- HTML pixel
- Tracking
- Unsubscribe, any action can be seen at sender
- eMail filters
- At new interactions, check junk folder

Spam

- "I have to hang up now, I'll call you right back"
- Verify and investigate that call back number
- "can you hear me" do not answer "yes"
- Sun City CA web page be \$cam smart
- Self Defense club Self and Home Security SIG
- Georgetown Police Williamson county sheriff
- Cyber Security SIG News Archive
- Spoofing CallerID semi legal
- Trust

Scam

- Bank card PIN
- Cell plan PIN
- PIN trending toward THE key
- IDentity theft misnomer
- Information gives NO indication of being stolen
- Our generation is the top target
- Our generation is less likely to complain

Scam

- Vulnerable systems, apps, people are found in seconds AND documented
- If you can "see" them, they can see you

- Spectre like side channel attack
- Site isolation
- Example.com Example.net
- Example.com Attacker.com corporate.example.com attacker.example.com

Obtain credentials if auto-filled

Data in browser extensions

Version 93.0.4577.82 (Official Build) (64-bit)

Chrome engine

- Safer not Safe
- E-postcard not e-mail
- ADMINISTRATOR
- Passphrases not passwords
- Radio not wireless

Vocabulary

- Most of our legacy is digital
- Inventory
- Accounts
- Payments
- Start now, never finish
 Review often
- Close & remove accounts
- Deceased alert to credit reporting agencies major 4 minor 40
- www.thedigitalbeyond.com
- www.everplans.com

Legacy



- Bank and Investment accounts & passcodes
- Social media
- eMail
- Cloud storage photos, videos,
- Medical history/treatments

- Copy of death certificate
- Private investigator / forensic expert
- CURRENT policy of sites
- First generation with this problem?
- Digital / virtual assets

- Smart home IoT
- Lock out of house
- Remote control of thermostat
- "spy" cameras/speakers

- Abandoned accounts can threaten family & friends
- Inventory start & maintain

	В	С	D	E	F	G	Н	
_	Utility Bills	Notification	Period	Statement Date	How Paid			Comments
	Georgetown Utilities	US Mail	Monthly	29 th	Auto Debit WF Visa			
	Atmos Energy	Email	Monthly	19 th	Auto Debit WF Visa			
	Suddenlink	Email	Monthly	17 th	Auto Debit WF Visa			
	US Mobile Cell Service	Email	Monthly	2 nd	Auto Debit MC			
	TxTag	Email	As Needed	As Needed	Auto Debit MC			
	Tablo TV	Email	Annual	August	Auto Debit MC			
	Acorn TV	Email	Annual	May	Auto Debit WF Visa			
	BritBox TV	Email	Annual	July	Auto Debit WF Visa			
	Lee Wright Landscape	US Mail	Weekly/Bi-Monthly	30 th	Check			
	Mow & Go Lawn Service		On Demand		Check			
	Home Cleaning		Every 2 weeks		Check			
	Church		Monthly	1 st Week	Check			
	Food Pantry		Monthly	2 nd Week	Check			
	GM Financial	Email	Monthly	15 th	Auto Debit WF Checking			
	SW Subscriptions Notification		Period Statement Date		How Paid			
	Microsoft 365	Email	Annual	September	Auto Debit WF Visa-3029			
	Quicken	Email	Annual	January	Auto Debit WF Visa-3029			

- InventoryVenmo, Zelle,
- Facebook
 Settings & privacy Memorialization



 Twitter, Instagram, Google, Photos

- SpyFone
 FTC orders deletion of surveillance data
 first of its kind (Retina-X)?
 stalkerware
 location, eMails, chats, videos, browser
 histories, ...
 banned
 notify victims
- mSpy, Mobistelth, Flexispy, ClevGuard
- Helpful <-> harmful
- Collection AND Protection

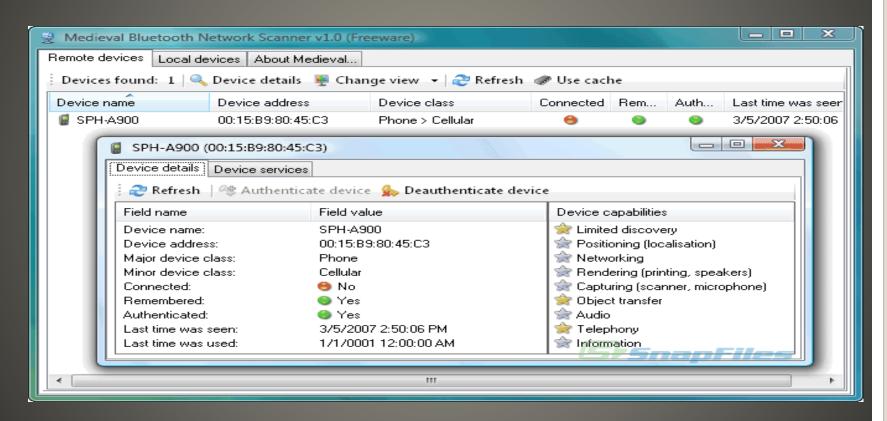
- Proton Mail
- VPN probably not their VPN
- Not EU, Swiss law
- 2017 13 requests, 2020 3572



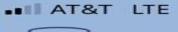
Anonymous / No Logs

- Bluetooth devices static MAC addresses
- BrakTooth
- USPS postal mailbox receipt of postage-paid U.S. mail business cards, flyers, etc.
- Gift card & customer loyalty rewards
- Apple delays Child Exploitation Images
- Office policy change
 Trusted Documents override
 Protected View settings
 ActiveX, Dynamic data Exchange, macros

- Bluetooth devices static MAC addresses
- BrakTooth



BlueTooth



12:11 PM

76%



BLE Devices

<no name>

Last updated: 12.11.39

Last updated: 12.11.39

<no name>

Last updated: 12.11.37

<no name>



Manufacturer: Sony Corporation

Last updated: 12.11.39

RSSI: -64 dB

<no name>



Last updated: 12.11.39

RSSI: -84 dB

<no name>



Last updated: 12.11.39

RSSI: -65 dB

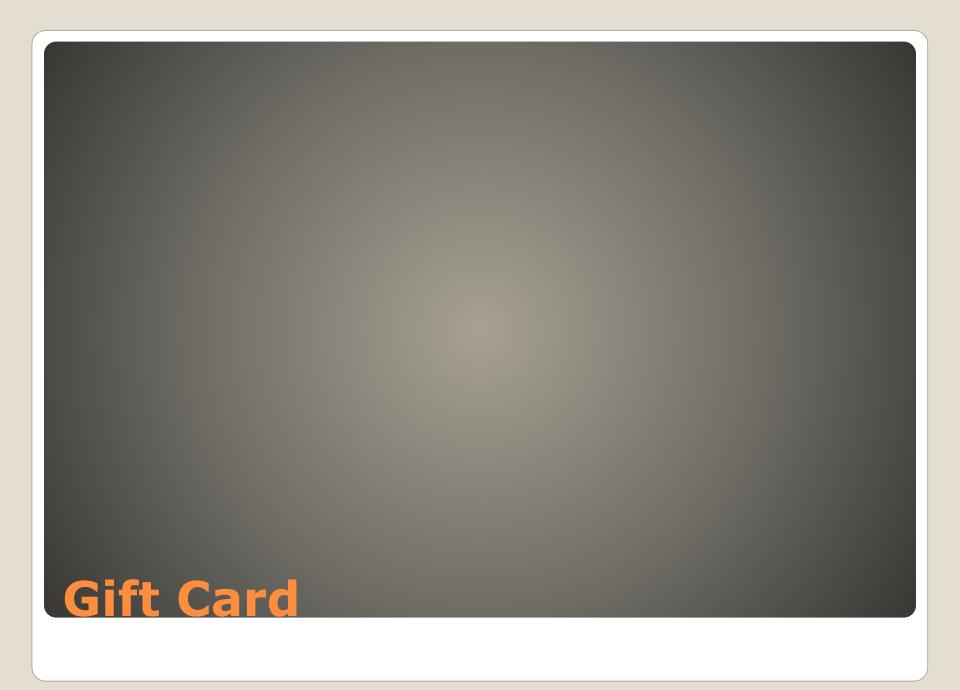
BLE Devices



Beacon

- Closed system
- Once shipped
- Once sold
- Never updated

Bluetooth it is RADIO



```
SEARCH FROM "giftcards@gc.nordst
SEARCH FROM "qc-orders@qc.email.
SEARCH FROM "gifts@paypal.com"
SEARCH FROM "jcrewgiftcards@jcre
            "notification@myprom
SEARCH FROM
            "bittrex.com"
SEARCH FROM
SEARCH FROM
            "noreply@messaging.s
            "@virtualrewardcente
SEARCH FROM
SEARCH FROM "corporategiftcards@
SEARCH FROM "coinsbit.io"
SEARCH FROM "bitmex.com"
SEARCH FROM "gianteagle@info.gia
SEARCH FROM "starbucks@giftcards
SEARCH FROM
            "customerservice@wel
SEARCH FROM "tidex.com"
SEARCH FROM "dex-trade.com"
SEARCH FROM "just for you@giftca
SEARCH FROM "bitbay"
SEARCH FROM "wazirx.com"
SEARCH FROM "@cabelas.com"
            "stremail@microsoft.
SEARCH FROM
            "noreply@kraken.com"
SEARCH FROM
SEARCH FROM
            "joinhoney.com"
SEARCH FROM
            "digital-no-reply@am
SEARCH FROM "noreply@giftcert.cc
SEARCH FROM "no-reply@giftogram.
SEARCH FROM "noreply@dogechain.i
SEARCH FROM "@opentable.com"
SEARCH FROM
            "southwestairlines@i
SEARCH FROM
            "donotreply.staples@
SEARCH FROM
            "message@mypromorewa
SEARCH FROM
            "info@2020.opinionir
            "@sm.ihq.com"
SEARCH FROM
            "marriott@email-marr
SEARCH FROM
SEARCH FROM "hilton.com"
```

Internationalized Domain Names

someone@arstechnica.com i is Cyrillic character NOT Latin character spoofing



BUT Outlook shows apple.com no distinction apple.com apple.com

Outlook IDN phishing

- Last Seen
 Everyone, My Contacts, Nobody
 My Contacts Except
 blacklist
- Profile picture, About details
- Add "reactions" to words, audio, video, GIFs

WhatsApp

- Mozilla VPN security audit
- "Alexa turn on adaptive volume"
- Intel apps on M1 Macs
 Rosetta emulator
 - Apple -> System Information -> software -> Applications
- Fortress Wi-Fi Security Alarms
 Capture & replay disarm command
 Knowing eMail address obtain IMEI

v H	ardware
	ATA
	Apple Pay
	Audio
	Bluetooth
	Camera
	Card Reader
	Controller
	Diagnostics
	Disc Burning
	Ethernet Cards
	Fibre Channel
	FireWire
	Graphics/Displays
	Memory
	NVMExpress
	PCI
	Parallel SCSI
	Power
	Printers
	SAS
	SATA
	SPI
	Storage
	Thunderbolt/USB4
	USB
V N	etwork
	Firewall
	Locations
	Volumes
	WWAN
	Wi-Fi
v S	oftware
	Accessibility
	Applications
	Developer
	Disabled Software

Extensions

Fonts

Mac mini								
Application Name	Version	Obtained from	Last Modified	Kind				
Rosetta 2 Updater	1.0	Apple	1/1/20, 2:00 AM	Apple Silicon				
zoom	5.7.4 (898)	Identified Developer	8/2/21, 3:07 PM	Apple Silicon				
OneDrive	21.139.0711	App Store	8/10/21, 11:24 AM	Intel				
Terminal	2.7.1	Apple	9/29/16, 10:07 PM	Intel				
Wireshark	3.4.5	Identified Developer	4/21/21, 12:22 PM	Intel				
Onecam	2.14	App Store	7/29/21, 1:47 PM	iOS				
com.microsoft.openxml		Unknown	4/27/21, 11:00 AM	Other				
Droplet with Settable Properties	1.0	Unknown	1/1/20, 2:00 AM	Other				
Recursive File Processing Droplet	1.0	Unknown	1/1/20, 2:00 AM	Other				
Recursive Image File Processing Droplet	1.0	Unknown	1/1/20, 2:00 AM	Other				
50onPaletteServer	1.1.0	Apple	1/1/20, 2:00 AM	Universal				
ABAssistantService	11.0	Apple	1/1/20, 2:00 AM	Universal				
About This Mac	1.0	Apple	1/1/20, 2:00 AM	Universal				
Accessibility Inspector	5.0	Apple	2/11/21, 1:36 AM	Universal				
AccessibilityVisualsAgent	1.0	Apple	1/1/20, 2:00 AM	Universal				
Activity Monitor	10.14	Apple	1/1/20, 2:00 AM	Universal				
AddPrinter	16.1	Apple	1/1/20, 2:00 AM	Universal				
AddressBookManager	11.0	Apple	1/1/20, 2:00 AM	Universal				
AddressBookSourceSync	11.0	Apple	1/1/20, 2:00 AM	Universal				
AddressBookSync	11.0	Apple	1/1/20, 2:00 AM	Universal				
AddressBookUrlForwarder	11.0	Apple	1/1/20, 2:00 AM	Universal				
AinulM	1.0	Apple	1/1/20, 2:00 AM	Universal				
AirDrop	1.0	Apple	1/1/20, 2:00 AM	Universal				
AirPlayUIAgent	2.0	Apple	1/1/20, 2:00 AM	Universal				
AirPort Base Station Agent	2.2.1	Apple	1/1/20, 2:00 AM	Universal				
AirPort Utility	6.3.9	Apple	1/1/20, 2:00 AM	Universal				
AirScanLegacyDiscovery	16.1	Apple	1/1/20, 2:00 AM	Universal				
AirScanScanner	16	Apple	1/1/20 2:00 AM	Universal				

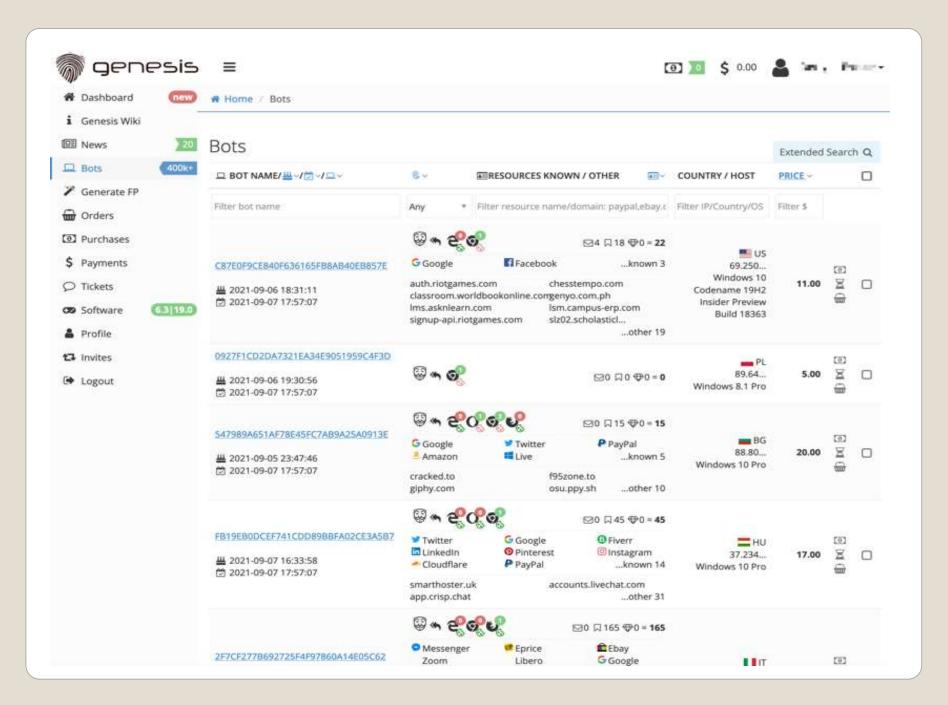
Rosetta 2 Updater:

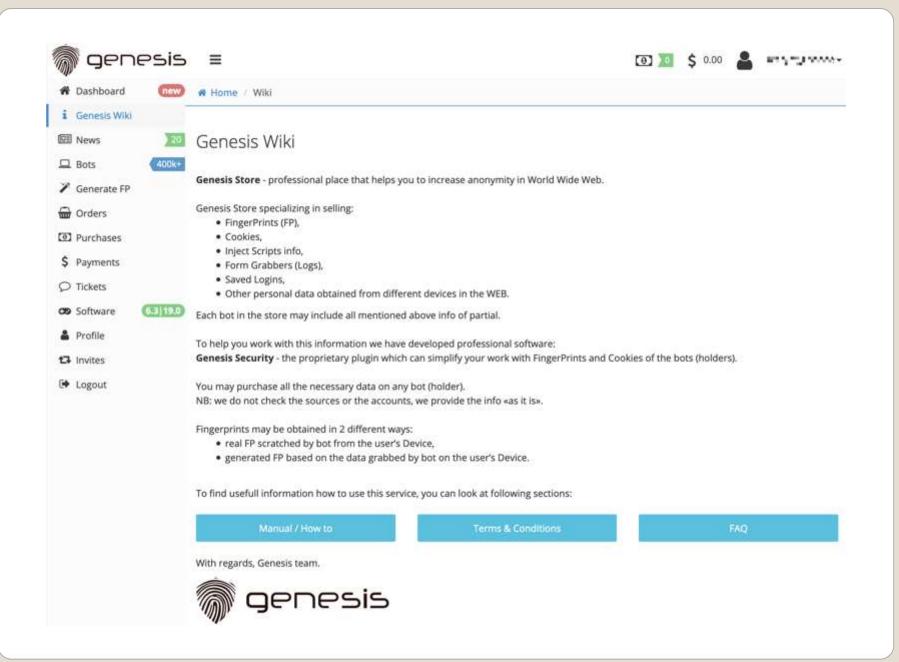
Version: 1.0 Obtained from: Apple Last Modified: 1/1/20, 2:00 AM

Kind: Apple Silicon

Signed by: Software Signing. Apple Code Signing Certification Authority. Apple Root CA

= John's Mac mini > Software > Applications > Rosetta 2 Updater





Texas House Bill 20
 Protect Texans from wrongful social media censorship

"silence conservative viewpoints & ideas"
50 million monthly users
simply based on political viewpoints
Consumer protection disclosures
Processes related to content management
Complaint and appeals process for content removal

- State of Texas pay social media influencers
 25 \$118,267.40
- Microsoft Teams Chat supervisors delete messages

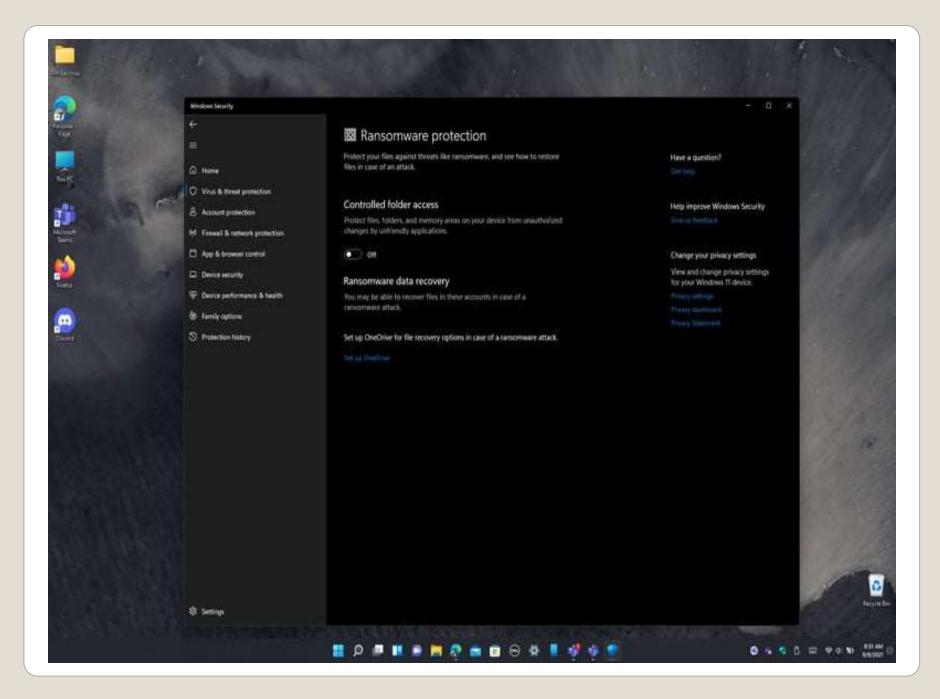
Facebook Camera glasses

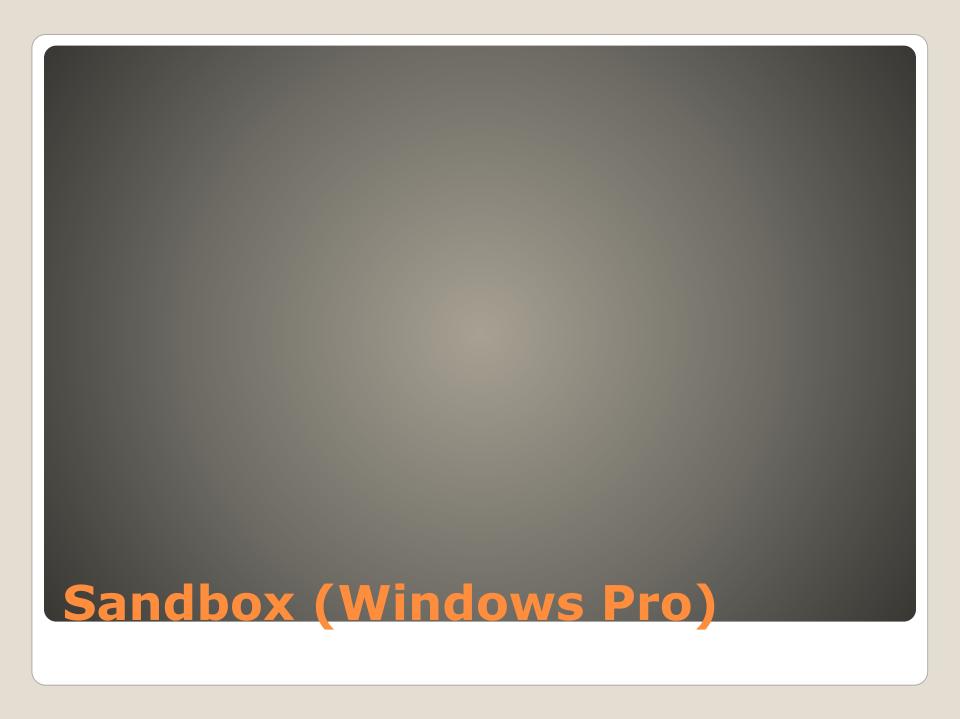


- Roomba pooptastrophes avoidance 100,000
 Pet Owner Official Promise (P.O.O.P.)
- Amazon TV
 Commercial -> Amazon buy now
- Pentagon -> Global Resource Systems
 Global Resource Systems -> Pentagon
 175M IPv4 addresses
 11:57am Inauguration day

Windows security
 Ransomware protections
 for enabled files & folders only

Windows Security Enablers





- Cognitive ability does not decline with age We for get why we got up, BUT
- Job 12:12

Is not wisdom found among the aged, and does not understanding come with a long life?

- "this is all above my head"
- "cyber scares me"
- Digital immigrants
- Technological and social changes
- Cyber security is everyone's business
- When each of us are safer, we ALL are safer
- We have accumulated wealth digital wealth
- They want it, it can be available

Senior

- Awareness, Preparedness, Understanding
- Attackers need one vulnerability
- We need to cover all
- Education
- Tortious and Hare
- The sky is falling
- "too big to fail"

- When you are 20 you care what everyone thinks
- When you are 40 you stop caring what everyone thinks
- When you are 60 you realize no one was thinking about you in the first place
- When you are 80 everyone is thinking of your wealth and how to obtain it

- Helpful < > Harmful
- Awareness, Preparedness, Understanding

Computer Club, Help Center, SIGs, Presentations, FirstTime, classes Cyber Security SIG meetings, NEWSBLOG Internet

• Questions, suggestions, comments?

SCCCCyber@gmail.com