

Sun City Computer Club

Windows SIG

January 28, 2020

**Questions, Comments, Suggestions welcomed at
any time**

Even Now

- Audio Recording of this session
- Audio Recording in Progress
- SIG attendees are required to be members of the chartered club sponsoring that SIG.
- Sun City Community Association By-law

- Your input is desired, needed, requested,
- 2020 meeting schedule – **Annex**
SIG leader?
- Special Interest GROUP
- 2020 dues mailing lists

Windows SIG news

- MS Edge released non-beta
- Beta still available AND improving
- Microsoft data breach 250 Million support call records redacted kinda BE Wary
- Windows 7 patch AFTER patch cessation

Windows News

- Very Very important
- Windows CryptoAPI Spoofing
CVE-2020-0610
KB4528760
- Realtek Bluetooth
- Realtek Network
- .NET framework 3.5 & 4.8
- Malicious Software Removal tool
- RDP

Windows Patch Tuesday

- Very Very important
- TRUST
- NSA Cybersecurity Directorate
- NSA Announcement
- EternalBlue NotPetya & WannaCry
- IDentity verification
- ECC not RSA

- MithM
- Signed Update
- TLS
- Replace RSA based signing with ECC
- Fully patched Windows 10 gave “vulnerable” with Vivaldi
- Patch browsers, email clients

CryptoAPI spoofing vulnerability

View update history

▼ Quality Updates (8)

[2020-01 Cumulative Update for .NET Framework 3.5 and 4.8 for Windows 10 Version 1909 for x64 \(KB4532938\)](#)

Successfully installed on 1/14/2020

[2020-01 Cumulative Update for Windows 10 Version 1909 for x64-based Systems \(KB4528760\)](#)

Successfully installed on 1/14/2020







- No moving parts
- No mechanical wear & tear
- Every disk block same access time as every disk block
- Finite write cycles
- Several thousand
- GOOD BACKUP practices 3-2-1
- Disk drive optimization techniques evolve

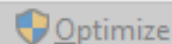
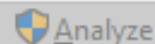
Care & Feeding solid state disk

Optimize Drives

You can optimize your drives to help your computer run more efficiently, or analyze them to find out if they need to be optimized. Only drives on or connected to your computer are shown.

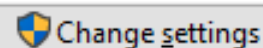
Status

Drive	Media type	Last run	Current status
 WINDOWS (C:)	Solid state drive	1/18/2020 5:59 PM	Optimization not available
 RECOVERY (D:)	Solid state drive	1/18/2020 6:33 PM	Optimization not available
 Windows (F:)	Hard disk drive	1/18/2020 5:57 PM	OK (0% fragmented)
 Recovery Image (G:)	Hard disk drive	1/18/2020 5:59 PM	OK (0% fragmented)



Scheduled optimization

On



Drives are being optimized automatically.

Frequency: Weekly

Close

- Less sensitivity to temperature, etc.
- Keep disk firmware & software up to date
- Disk segregation SSD for OS
- Disk RAID
- Larger SSD will have less write cycles used
- More RAM for disk caching

Care & Feeding Solid state disk

- Do NOT Defrag
- Do NOT use mechanical disk optimization
- Do NOT exceed 90% full

- Disable indexing security? Really?
- Paging file to hard drive(s)
- Disable SuperFetch (SysMain)

Care and Feeding Solid state disk

Administrator: Command Prompt

Microsoft Windows [Version 10.0.18363.592]

(c) 2019 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>fsutil behavior query DisableDeleteNotify

NTFS DisableDeleteNotify = 0 (Disabled)

ReFS DisableDeleteNotify = 0 (Disabled)

C:\WINDOWS\system32>diskmgmt.msc


C:\WINDOWS\system32>fsutil behavior set DisableDeleteNotify 0

NTFS DisableDeleteNotify = 0 (Disabled)

C:\WINDOWS\system32>

- Pagefile, swapfile, Misc. storage
- IMHO, better to have than not
- Better to have on hard disk than SSD
- Better to have minimal on SSD, use HD

Pagefile

 Control Panel\System and Security\System

← → ▾ ↑  > Control Panel > System and Security > System

Control Panel Home

View basic information about your computer

 Device Manager


Windows edition

 Remote settings

Windows 10 Home

 System protection

© 2019 Microsoft Corporation. All rights reserved.

 Advanced system settings

System Properties



Computer Name Hardware **Advanced** System Protection Remote

You must be logged on as an Administrator to make most of these changes.

Performance

Visual effects, processor scheduling, memory usage, and virtual memory

Settings...

User Profiles

Desktop settings related to your sign-in

Settings...

Startup and Recovery

System startup, system failure, and debugging information

Settings...

Environment Variables...

OK

Cancel

Apply

Performance Options



Visual Effects **Advanced** Data Execution Prevention

Processor scheduling

Choose how to allocate processor resources.

Adjust for best performance of:

☒ Programs ☐ Background services

Virtual memory

A paging file is an area on the hard disk that Windows uses as if it were RAM.

Total paging file size for all drives: 11752 MB

Change...

Virtual Memory



Automatically manage paging file size for all drives

Paging file size for each drive

Drive [Volume Label]

Paging File Size (MB)

C: [WINDOWS]

1000 - 1500

D: [RECOVERY]

None

F: [Windows]

System managed

G: [Recovery Image]

None

Selected drive:

C: [WINDOWS]

Space available:

785691 MB

☒ Custom size:

Initial size (MB):

1000

Maximum size (MB):

1500

☐ System managed size

☐ No paging file

Set

Total paging file size for all drives

Minimum allowed:

16 MB

Recommended:

2930 MB

Currently allocated:

11752 MB

OK

Cancel

- Hibernation file -> hiberfil.sys
- Recent advances -> SSD more reliable
- HDD have physical fatigue
- Microsoft update drivers, not firmware
- High Performance

Care and Feeding Solid state disk

- Replace laptop drive
- Kit to replace
- Help Center

- Add drive to Desktop / tower
- SCSI, IDE, ATA, SATA, SAS

- Form Factor
- Existing cabling

Well, now I want SSD



- None of us are as experienced as all of us
- Awareness, Preparedness, Understanding
- Participate

