

OpenAFS on Windows: A Status Report

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26 March 2014

SMB Windows is dead

- 1.6 Windows releases were halted after 1.6.1.
- No fix for SMB 1.x Authentication Bug in Windows 7 and beyond
 - Microsoft fixed it but insufficient demand from community for them to release it

1.7 News

- 1.7.30 is current
 - 13 releases since Edinburgh conference
- Windows 8.1 and Server 2012 R2

Symlink Processing

- Symlink Reparse Points compatible with NTFS and ReFS
- Symlinks can be copied to/from \\AFS
 - Robocopy /SL option

Cygwin Interoperability

- As of Cygwin 1.7.19 and OpenAFS 1.7.23, Cygwin recognizes //afs
 - In `–s` now creates symlinks
- Prior versions of Cygwin
 - Reported symlinks as directories or files
 - Copied target instead of link
 - Reported incorrect size/free space

Symlinks on Windows

- <http://blog.secure-endpoints.com/2013/03/symbolic-links-on-windows.html>
- .NET and Java (pre-1.6)
 - not Reparse Point aware
 - Read File Sizes and Attributes incorrectly
- Side Effect:
 - Reads of Symlinks to Files truncates data
- OpenAFS Reparse Point Policies
 - Expose Symlinks as x-volume hardlinks

Anti-malware Headaches

- Trend Micro 10.4 and prior releases should be avoided
- Workaround for TM related deadlocks produced other deadlocks
- OpenAFS 1.7.27 replaced fix with an alternative
 - Safe for TM 10.5 and above

Windows XP / Server 2003

- OpenAFS 1.7.27 and prior experience data corruption due to a bug in the Windows IO Manager
 - Multiple outstanding Synchronous Writes must not be issued to the same file
- Workaround in 1.7.28
 - Do not defer writes that cannot be completed

1.7.30 Released Today

- Performance optimizations
 - Cache VL_GetAddrsU responses
- XP cannot use secure bindings of devices to MUP
 - Prevents “limited” users from accessing \\AFS
- Windows Advanced Firewall autoconfiguration changes

Windows XP End of Life

- 8 April 2014

- No more updates for XP from Microsoft
- No more Microsoft Anti-malware Engine Updates for XP

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