EOS workshop



Contribution ID: 28 Type: not specified

Windows drive for EOS-wnc

Tuesday, 2 March 2021 10:10 (10 minutes)

Context: Windows nature connection of EOS-wnc to Windows operating system.

Objectives: The connection of the EOS-wnc on Windows platform should be as it is for Windows local disks, external disk storages, it means as a Windows disk driver letter.

Method: A storage on Windows operating is presented as a "disk drive letter". Architecture of Windows storage drivers has following layers as follows:

- 1. IRP for Upper-filter driver
- 2. IRP for Storage-class driver
- 3. SRB for Lower-filter driver
- 4. SRB for Storage port driver
- 5. SRB for Bus-specific commands

where

IRP (I/O request packets): kernel mode structures that are used by Windows Driver Model (WDM) SRB (SCSI Request Block): SCSI command descriptor blocks (CDBs)

For EOS-wnc is implemented "thin" Windows disk driver.

Result: Windows driver software is low-level software and bugs in low-level software can be extremely painful; bugs can cause a loose of all data on disk drive including operating system. Therefore, the EOS-wnc Windows drivers implementation is a "thin driver" to maximize stability and security of this part of software.

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Session Classification: EOS