DSP0222 1.2 - NC-SI AEN OEM Support Proposal (Work-in-Progress)

Disclaimer

- The information in this presentation represents a snapshot of work in progress within the DMTF.
- This information is subject to change without notice. The standard specifications remain the normative reference for all information.
- For additional information, see the Distributed Management Task Force (DMTF) website.

Problem Statement

- OEM can define new AENs
- Numbering of OEM AENs is in global AEN range (0x80 - 0xFF)
- No indication of OEM that defined the AEN:
  - In AEN itself
  - In Enable AEN command.
- If more than one OEM defines AENs in same product, can cause conflict
  - E.g. IHV and platform vendor defined AENs.
- In contrast, OEM commands contains IANA:

Bytes/Bits	31..24	23..16	15..08	07..00
00..15	NC-SI Header			
16..19	Manufacturer ID (IANA)			

Proposed Solution – OEM AEN new format

- Targets NC-SI 1.2.
  - Backward compatible with current OEM AEN usage
- Keep the control type for both standard and OEM AENs as 0xFF.
- Define a new format for OEM AENs (AEN Type = 0x80..0xFF)
- Add an optional command to enable AENs from specific OEMs (list of IANAs) – Enable OEM AENs command.
- Define a bit in AEN control word to advertise and enable the use of the new OEM AENs format.
- Add a capability bit to define the support for the new AEN format
  - Bits 7..31 in Capabilities Flags field are free.
- We can add an optional command to discover the list of IANAs of supported OEM AENs - Discover OEMs command.

Details

- AEN format for OEM AENs:

	Bits			
Bytes	31..24	23..16	15..08	07..00
00..03	MC ID = 0x0	0x01	Reserved	IID = 0x0
04..07	Control Packet Type = 0xFF	Originating Ch. ID	Reserved	Payload Length
08..15	Reserved			
16..19	Reserved			AEN Type
20..23	Manufacturer ID (IANA)			
24..27	OPTIONAL AEN Data			
28..31	Checksum			

- AEN control word:

Bit Position	Field Description	Value Description
0	Link Status Change AEN control	0b = Disable Link Status Change AEN 1b = Enable Link Status Change AEN
1	Configuration Required AEN control	0b = Disable Configuration Required AEN 1b = Enable Configuration Required AEN
2	Host NC Driver Status Change AEN control	0b = Disable Host NC Driver Status Change AEN 1b = Enable Host NC Driver Status Change AEN
14..3	Reserved	Reserved
15	Support OEM AEN format	
31..16	OEM-specific AEN control	OEM-specific control