Proposed Extensions to NAP for Multi-Function Devices
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IDS Attributes to SOH/SOHR Attributes:

Defining the product type:

SYSTEM HEALTH ID TLV (Type = 2, Length = 4)

Reference: MS-SOH, pg 14

This required attribute provides the identifier of the System Health Agent (SHA) or the System Health Validator (SHV) generating the SOH or SOHR report entry. This must be the first entry in the SOH or the SOHR. The *Value* field contains two parts.

1. VENDOR SMI CODE FIELD (3 bytes)

For MFDs this will be the PWG SMI 2699 (0xA8B).

2. COMPONENT ID FIELD (1 byte)

This field defines the component type, qualified by the *Vendor SMI Code*.

   1 = Printer Device
   2 = Scanner Device
   4 = Copier Device
   8 = Fax Device
   Values are additive. (e.g. 7 = Printer, scanner, copier MFD.)

Product Name:

Reference: MS-SOH, pg 22

PRODUCT NAME TLV (Type = '0A' or '8A', Length = variable)

This optional attribute contains a null terminated string providing the name of the software product installed on the client system.

Product Version:

PRODUCT VERSION TLV (Type = NEW, Length = variable)

This attribute contains a null terminated string providing the version of the software product installed on the client system.

Vendor Name:

VENDOR NAME TLV (Type = NEW, Length = variable)

This attribute contains a null terminated string providing the vendor name of the product installed on the client system.

Vendor Identifier:

VENDOR ID TLV (Type = NEW, Length = 3 bytes)

This attribute contains the IANA SMI of the vendor of the product installed on the client system.

O/S Name:

O/S NAME TLV (Type = NEW, Length = variable)

This attribute contains a null terminated string providing the name of the operating system in the product installed on the client system.

O/S Version:

O/S VERSION TLV (Type = NEW, Length = variable)

This attribute contains a null terminated string defining the version of the operating system in the product installed on the client system. The version should include any hot patches currently installed on the O/S.

O/S Installation Time:

O/S INSTALLATION TIME TLV (Type = NEW, Length = variable)

This attribute contains a null terminated string defining the date and time the operating system was installed on the product. The time and date shall be presented using the format (TBD).

Application Name:

APPLICATION NAME TLV (Type = NEW, Length = variable)

This attribute contains a null terminated string providing the name of the application in the product. Hot Fix patches may be included as an application.

Application Version:

APPLICATION VERSION TLV (Type = NEW, Length = variable)

This attribute contains a null terminated string defining the version of the application in the product.

Port Filter:

PORT STATE TLV (Type = NEW, Length = variable)

This attribute defines the current state of all ports existing on the product. Each existing port is represented by the following two fields.

1. PORT NUMBER (2 bytes)
2. PORT STATE (2 bytes)   0 = Disabled;   1 = Enabled.

Certification/Configuration State: (The extended attributes?)

What to do for Health Class?:

HEALTH CLASS (Type = 8 or '88', Length = 1)

Reference: MS-SOH, pg 21

This optional attribute indicates the type of health check being performed by the System Health Agent.
0 = Firewall; 1 = Anti-Virus; 2 = Anti-Spyware; 3 = Automatic Updates; 4 = Security Updates

VENDOR SPECIFIC TLV (Type = 7, Length = variable)

Reference: MS-SOH, pg 15

This required attribute contains vendor specific information. The *Value* field contains two parts.

1. VENDOR ID FIELD (4 bytes)

This optional field may contain the IANA SMI of the organization defining the content and structure of the *Data* field. NAP does not interpret this field and it may be used for any purpose or omitted.

For MFDs this will be the PWG SMI 2699 (0xA8B).

2. DATA FIELD (variable)

This field contains the vendor specific data. PWG TLVs follow.

What to do about the following?:

TIME OF LAST UPDATE (Type = 5 or '85', Length = 8)

Reference: MS-SOH, pg 19

This optional attribute indicates the UTC time when the client machine was last updated. UTC time defines the number of 100 nanoseconds intervals since January 1, 1601.

CLIENT ID (Type = 6 or '86', Length = variable)

Reference: MS-SOH, pg 20

This optional attribute contains a null terminated string representing the client identifier.