x0007 - Device Friendly Name

Version 0

Overview

The Device Friendly Name is the device name provided to the host during pairing or connection, displayed to the user to identify the device. This feature allows reading and changing the Device Friendly Name.

Friendly Name encoding is 8 bits ASCII.

Notes

- The Device Name available through feature x0005 is a Marketing Name.
- Implementation could support Friendly Name UTF-8 encoding, but support by OSes is uncertain.

Functions and Events

[0] getFriendlyNameLen() → nameLen, nameMaxLen, defaultNameLen

Get the length of current name, default name, and maximum allowed length for device name. Length is in terms of useful bytes.

Parameters

none

Return

[1byte] nameLen

Current Friendly Name byte length.

[1byte] nameMaxLen

Maximum allowed Friendly Name byte length.

[1byte] defaultNameLen

Default Friendly Name byte length.

Table 1. getFriendlyNameLen() request packet format

byte \ bit	7	6	5	4	3	2	1	0
0	nameLen							
1	nameMaxLen							
2	defaultNameLen							
3..15	reserved							

Errors

none

[1] getFriendlyName(byteIndex) → string

Get a current Friendly Name chunk, starting from a byte index lower than nameLen returned by getFriendlyNameLen().

Parameters

[1byte] byteIndex

Index of the first byte to copy [0..nameLen-1].

Table 2. getFriendlyName() request packet format

byte \ bit	7	6	5	4	3	2	1	0
0	byteIndex							
1..15	reserved							

Return

[1byte] byteIndex

Same as parameter.

[15bytes] nameChunk

The name chunk, copied from full name byteIndex'th byte, padded with null bytes '\0' if the copied string is shorter than the payload size (HPPLong: 16 bytes).

Table 3. getFriendlyName() response packet format

byte \ bit	7	6	5	4	3	2	1	0
0	byteIndex							
1	nameChunk[0]							
..	..							

byte \ bit	7	6	5	4	3	2	1	0
15	nameChunk[14]							

Errors

none

[2] getDefaultFriendlyName(byteIndex) → string

Get a Friendly Name chunk, starting from a byte index lower than defaultNameLen returned by getFriendlyNameLen().

Parameters

[1byte] byteIndex

Index of the first byte to copy [0..defaultNameLen-1].

Table 4. getDefaultFriendlyName() request packet format

byte \ bit	7	6	5	4	3	2	1	0
0	byteIndex							
1..15	reserved							

Return

[1byte] byteIndex

Same as parameter.

[15bytes] nameChunk

The name chunk, copied from full name byteIndex'th byte, padded with null bytes '\0' if the copied string is shorter than the payload size.

Table 5. getDefaultFriendlyName() response packet format

byte \ bit	7	6	5	4	3	2	1	0
0	byteIndex							
1	nameChunk[0]							
..	..							
15	nameChunk[14]							

Errors

none

[3] setFriendlyName(byteIndex, nameChunk) → nameLen

Set a Device Friendly Name chunk, starting at byteIndex. Existing string is overwritten, extended or shorten by the chunk, considering that resulting Friendly Name new length is byteIndex + strlen(chunk), truncated to maximum allowed length.

Change is immediate (on device) but usually seen by hosts at reconnection.

Parameters

[1byte] byteIndex

Index of the first device name byte to write.

[15bytes] nameChunk

The device name chunk to write, padded with null bytes '\0' if it is shorter than the payload size.

Table 6. setFriendlyName() response packet format

byte \ bit	7	6	5	4	3	2	1	0
0	byteIndex							
1	nameChunk[0]							
..	..							
15	nameChunk[14]							

Return

[1byte] nameLen

Resulting Device Friendly Name len, 0 in case of failure (HW write failure).

Table 7. setFriendlyName() request packet format

byte \ bit	7	6	5	4	3	2	1	0
0	nameLen							
1..15	reserved							

Errors

none

[4] resetFriendlyName() → nameLen

Reset current Device Friendly Name to Default Friendly Name.
Change is immediate (on device) but usually seen by hosts at reconnection.

Parameters

none

Return

[1byte] nameLen

Resulting Device Friendly Name len, 0 in case of failure (HW write failure).

Table 8. resetFriendlyName() request packet format

byte \ bit	7	6	5	4	3	2	1	0
0	nameLen							
1..15	reserved							

Errors

none

ChangeLog

- Version 0: Initial version