
fastsnmp Documentation

Release 0.1

Aleksandr Balezin

Oct 25, 2018

Contents

1	fastsnmp.snmp_parser module	1
2	fastsnmp.snmp_poller module	3
	Python Module Index	5

fastsnmp.snmp_parser module

exception fastsnmp.snmp_parser.SNMPEXception

Bases: *Exception*

exception fastsnmp.snmp_parser.VarBindContentException

Bases: *fastsnmp.snmp_parser.SNMPEXception*

exception fastsnmp.snmp_parser.VarBindUnpackException

Bases: *fastsnmp.snmp_parser.SNMPEXception*

fastsnmp.snmp_parser.encode_varbind()

fastsnmp.snmp_parser.integer_decode()

Decode input stream into a integer

Parameters *stream* (*bytes*) – encoded integer

Returns decoded integer

Return type *int*

fastsnmp.snmp_parser.integer_encode()

fastsnmp.snmp_parser.length_decode()

fastsnmp.snmp_parser.length_encode()

Function takes the length of the contents and produces the encoding for that length. Section 6.3 of ITU-T-X.209

Parameters *length* (*int*) – length

Returns encoded length

Return type *bytes*

fastsnmp.snmp_parser.msg_decode()

fastsnmp.snmp_parser.msg_encode()

Build SNMP-message

Parameters

- *req_id* (*int*) – request identifier

- **community** (*int*) – snmp community
- **varbinds** (*int*) – list of oid to encode or bytes if encoded
- **msg_type** (*str*) – index of ASN_SNMP_MSG_TYPES
- **max_repetitions** – max repetitions
- **non_repeaters** – non repeaters

Returns encoded message

Return type *bytes*

`fastsnmp.snmp_parser.objectid_decode()`

`fastsnmp.snmp_parser.objectid_encode()`

encode an ObjectID into stream X.690, chapter 8.19 :param oid: OID :type oid: str :returns: stream :rtype: bytearray

`fastsnmp.snmp_parser.octetstring_decode()`

`fastsnmp.snmp_parser.octetstring_encode()`

encode an octetstring into string

Parameters **string** (*string*) – string

Returns string

Return type *bytes*

`fastsnmp.snmp_parser.parse_varbind()`

`fastsnmp.snmp_parser.sequence_decode()`

`fastsnmp.snmp_parser.tag_decode()`

`fastsnmp.snmp_parser.tag_encode()`

Returns encoded identifier octets for this object. Section 6.3 of ITU-T-X.209

Parameters

- **asn_tag_class** (*int*) – asn tag class
- **asn_tag_format** (*int*) – asn tag format
- **asn_tag_number** (*int*) – asn tag number

Returns tag

Return type *bytes*

`fastsnmp.snmp_parser.unsigned_decode()`

Decode input stream into a integer

Parameters **stream** (*bytes*) – encoded integer

Returns decoded integer

Return type *int*

`fastsnmp.snmp_parser.unsigned_encode()`

`fastsnmp.snmp_parser.value_encode()`

Encoded value by ASN.1

`fastsnmp.snmp_parser.varbinds_encode()`

`fastsnmp.snmp_parser.varbinds_encode_tlv()`

fastsnmp.snmp_poller module

`fastsnmp.snmp_poller.poller`(*hosts*, *oids_groups*, *community*, *timeout*=3, *backoff*=2, *retry*=2,
msg_type='GetBulk')

A generator that yields SNMP data

Parameters

- **hosts** (*list* | *tuple*) – hosts
- **oids_groups** (*list* | *tuple*) – oids_groups
- **community** (*str*) – community

Returns host, main_oid, index_part, value

Return type `tuple`

`fastsnmp.snmp_poller.resolve`(*hosts*)

f

`fastsnmp.snmp_parser`, 1
`fastsnmp.snmp_poller`, 3

E

encode_varbind() (in module fastsnmp.snmp_parser), 1

F

fastsnmp.snmp_parser (module), 1

fastsnmp.snmp_poller (module), 3

I

integer_decode() (in module fastsnmp.snmp_parser), 1

integer_encode() (in module fastsnmp.snmp_parser), 1

L

length_decode() (in module fastsnmp.snmp_parser), 1

length_encode() (in module fastsnmp.snmp_parser), 1

M

msg_decode() (in module fastsnmp.snmp_parser), 1

msg_encode() (in module fastsnmp.snmp_parser), 1

O

objectid_decode() (in module fastsnmp.snmp_parser), 2

objectid_encode() (in module fastsnmp.snmp_parser), 2

octetstring_decode() (in module fastsnmp.snmp_parser),
2

octetstring_encode() (in module fastsnmp.snmp_parser),
2

P

parse_varbind() (in module fastsnmp.snmp_parser), 2

poller() (in module fastsnmp.snmp_poller), 3

R

resolve() (in module fastsnmp.snmp_poller), 3

S

sequence_decode() (in module fastsnmp.snmp_parser), 2

SNMPException, 1

T

tag_decode() (in module fastsnmp.snmp_parser), 2

tag_encode() (in module fastsnmp.snmp_parser), 2

U

uinteger_decode() (in module fastsnmp.snmp_parser), 2

uinteger_encode() (in module fastsnmp.snmp_parser), 2

V

value_encode() (in module fastsnmp.snmp_parser), 2

VarBindContentException, 1

varbinds_encode() (in module fastsnmp.snmp_parser), 2

varbinds_encode_tlv() (in module fast-
snmp.snmp_parser), 2

VarBindUnpackException, 1