# PROTOCOL

MESSAGE_TYPE:	MESSAGE TYPE FIELD:
SERVER ERROR	0X0
GET PROPERTY QUERY	0X1
GET PROPERTY RESPONSE	0X2
	0X3
	0X4
	0X5
	0X6
	0X7
	0X8
	0X9
PUSH SUBSCRIBE	0X10
PUSH SINGLE UPDATE	0X11
PUSH MULTI-UPDATE 1	0X12
PUSH MULTI-UPDATE 1.1	0X13
PUSH MULTI-UPDATE 1.2	0X14
PUSH MULTI-UPDATE 2	0X15
PUSH MULTI-UPDATE 2.1	0X16
PUSH MULTI-UPDATE 2.2	0X17
	0X18
	0X19
PUSH UNSUBSCRIBE	0X20

# PROTOCOL

Description:
s transpland and a
→ try reload page  Sondad by alignt to conver for retrive a property
Sended by client to server for retrive a property
Sended by the server contains a property
The client subscribe for periodic updates of a property
Sended by server value and timestamp

## **GET MESSAGES**

# GET PROPERTY QUERY MESSAGE

PROPERTY ID (STRING)	e (terminator)	Equal $0 = get$ all properties
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## **GET PROPERTY RESPONSE MESSAGE**

MESSAGE	TYPE 0x2	
	PROPERTY_ID	Unique sequential identifier
NAME_LENGTH		
NAME >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		(max255 character)
VALUE_TYPE		
VALUE	>>>>>>>>>>	Lenght defined by tvalue type
	MAX UPDATE FREQUENCY	1*
	MIN UPDATE FREQUENCY	2*
MAX QUE	UE LATENCY DI ACCODAMENTO MAX	] 3*
DESCRIPTIO	N_LENGTH	_
DESCRIPTION	>>>>>>>>>>	(max255 character)
	TIME STAMP MSB	Last update timestamp
	TIME STAMP LSB	msb secondi lsb microsecondi

\	/ALUE_TYPE
0X0	RESERVED
0X1	INT
0X2	FLOAT
0X3	STRING
0x4	DOUBLE

//In this case the first byte of value field is the stringh lenght //other bytes are an ascii vector

#### **PUSH MESSAGE SUBSCRIBE**

## PACKET TYPE(0x10)

1 / O ( ) ( ) ( ) ( )	
PROPERTY_ID	
MAX UPDATE FREQUENCY	1*
MIN UPDATE FREQUENCY	2*
MAX OUEUE LATENCY DI ACCODAMENTO MAX	3*

TIPO UPDATE CONSENTITO??

OPZIONI TIME STAMP(no time stamp, risoluzione time stamp, num sequenziali...?)

- max trasmission per second else enqueue or drop 1\*
- 2\* Force server to retrasmit unvaried propeties
- 3\* Limit time that a packet could wait in the queue

## **PUSH MESSAGE SINGLE UPDATE**

## PACKET TYPE(0x11)

PROPERTY_ID		
VALUE >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		
TIME_STAMP_MSB		
	TIME STAMP LSB	

#### **PUSH MESSAGE MULTI-UPDATE 1**

# PACKET TYPE(0x12)

TIME\_STAMP\_MSB

PROPERTY\_ID

XCOUNT	
VALUE1	>>>>>>>
	TIME STAMP LSB1
VALUE2	>>>>>>
	TIME STAMP LSB2
VALUE3	>>>>>>
	TIME STAMP LSB3

## **PUSH MESSAGE MULTI-UPDATE 1.1**

### PACKET TYPE(0x13)

TIME_ST	AMP_MSB	
PROPERTY_ID		
LENGHT		
VALUE1	>>>>>>>	>>>>>>
TIME STAMP LSB1		
VALUE2	>>>>>>>	>>>>>>
		TIME STAMP LSB2
VALUE3	>>>>>>>	>>>>>>
		TIME STAMP LSB3

# PROPERTY ID LENGHT VALUE... TIME STAMP LSB **PUSH MESSAGE MULTI-UPDATE 1.2** PACKET TYPE(0x14) TIME\_STAMP\_MSB Lenght n TIME STAMP LSB 1 TIME STAMP LSB 2 TIME STAMP LSB n PROPERTY ID LENGHT VALUE... TIME STAMP index VALUE...

TIME STAMP index TIME STAMP index

PROPERTY ID

LENGHT

TIME STAMP index

#### **PUSH MESSAGE MULTI-UPDATE 2**

PACKET TYPE(0x15)

TIME\_STAMP\_MSB

TIME STAMP LSB

LENGHT

PROPERTY_ID			
VALUE >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
PROPERTY_ID			
VALUE	>>>>>>	>>>>>>	
PROPERTY_ID			
VALUE	>>>>>>	>>>>>>	

## **PUSH MESSAGE MULTI-UPDATE 2.1**

PACKET TYPE(0x16)

TIME\_STAMP\_MSB

TIME STAMP LSB

#### **LENGHT** PROPERTY\_ID VALUE... PROPERTY ID VALUE... PROPERTY ID VALUE... >>>>>>>>>>>>>>> TIME STAMP LSB LENGHT PROPERTY\_ID VALUE... TIME STAMP LSB LENGHT PROPERTY ID VALUE... >>>>>>>>>>> PROPERTY\_ID VALUE... >>>>>>>>>>> PROPERTY\_ID

#### **PUSH MESSAGE MULTI-UPDATE 2.2**

VALUE...

POSH MESSAGE MULTI-UPDATE 2.2
PACKET TYPE(0x17)
TIME STAMP MSB
Lenght n
PROPERTY_ID 1
PROPERTY_ID 2
···
PROPERTY_ID N
TIME STAMP LSB
LENGHT
PROPERTY_Index VALUE >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
PROPERTY Index
VALUE
PROPERTY Inde>>>>>>>>>>>>>
VALUE
PROPERTY Inde>>>>>>>>>>>>
VALUE
TIME STAMP LSB
LENGHT
PROPERTY_Index
VALUE >>>>>>>>>>>>
PROPERTY_Index
VALUE >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
PROPERTY_Index
VALUE >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
PROPERTY_Index
VALUE >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

# PUSH MESSAGE UNSUBSCRIBE

PROPERTY\_ID

# NOTE

NOTE

2038bug Segnalazione esplicita tagli?