

GPS Data Transfer Plugin Configuration

(2022-5-12)

History:

Date	Description
2022-05-12	<ul style="list-style-type: none">● Change alarm parameter index from 1 to 0 , 0 stand for the first parameter● Date time in message is from device.

Prepare Configuration File

Create a file named "libgpstran_client.ini" in {server installation dir}\ , as following

[Settings]

CacheSize=2000

SendToAllSubscribedServers=0

[Server1]

Enabled=1

Server=127.0.0.1

Port=6688

DeviceIDs=50000,50002,50003

DeviceIDFromFile=0

DeviceIDFile=DeviceIDs.txt

SendStatus=1

StatusCmdHeader=\$\$STATUS

SendAlarm=1

AlarmTypes=<all>
AlarmCmdHeader=\$\$ALARM

SendTransparentPortData=1
TransparentPortDataTypes=<all>
TransparentPortDataCmdHeader=\$\$DATA

[Server2]
Enabled=1
Server=127.0.0.1
Port=6689
DeviceIDs=50004,50005,50008-50030

SendStatus=1
StatusCmdHeader=\$\$STATUS

SendAlarm=1
AlarmTypes=<all>
AlarmCmdHeader=

SendTransparentPortData=1
TransparentPortDataTypes=<all>
TransparentPortDataCmdHeader=

.....

[ServerN]
Enabled=1
Server=127.0.0.1
Port=6690
DeviceIDs=<all>
RawFuel=0
SendStatus=1
StatusCmdHeader=\$\$STATUS

SendAlarm=1
AlarmTypes=<all>
AlarmCmdHeader=\$\$ALARM

SendTransparentPortData=1
TransparentPortDataTypes=<all>
TransparentPortDataCmdHeader=\$\$DATA

[Settings] section parameter description

CacheSize : The maximum number of GPS message should be cached in plugin , this number should not less than 1/3 of online device number.

SendToAllSubscribedServers: Send gps data to all subscribed server or not . 1 yes , 0 no, only the first subscribed server receives the data.

[ServerX] section parameter description

ServerX is the subscribed server configuration section, one server per section

Enabled : Transfer gps data or not to target subscribed server , 1 enabled, 0 disable;

Server : Target server address, IP or domain name .

Port : The port that server listens on.

DeviceIDs : Device ID list to subscribe (not the device name), this parameter supports following formats:

- 1) ID list with comma : id1,id2,...idx (all device id in one single line)
- 2) ID range : id1-id2 (id1 , id2 shall be valid number and id1 < id 2)
- 3) All devices : <all> (subscribe all devices)

DeviceIDFromFile : if value is 1 , load device id from file specified by DeviceIDFile key, instead of **DeviceIDs** .

DeviceIDFile : if **DeviceIDFromFile** =1, Device IDs list is load from file, all ids are splitted by comma .

RawFuel : if RawFuel=1, fuel value in status message is the fuel sensor raw data, if RawFule=0, fuel value is liter.

SendStatus : Send device status data or not ,include gps , fuel , mileage .etc
1 send status , 0 not send.

StatusCmdHeader : Custom header of status data, such as '\$\$STATUS', it can be empty.

SendAlarm : Send device alarm message or not , 1 send ,0 not send

AlarmTypes : Alarm type to be sent to target server, it accepts following values

- 1) <all> : All alarm will be send to target server
- 2) Type1-Type2 : Alarm type range , in integers , for example 10-30
- 3) Typp1,Type2,... : Specified alarm to be sent , for example 1,4,10

AlarmCmdHeader : Custom message header of alarm, for example \$\$ALARM

SendTransparentPortData : Send transparent port data or not , 1 yes , 0 no;

TransparentPortDataTypes : Data type to be sent to target server , it accept following values:

- 1) <all> : All alarm will be send to target server
- 2) Type1-Type2 : Alarm type range , in integers , for example 10-30
- 3) Typp1,Type2,... : Specified alarm to be sent , for example 1,4,10

TransparentPortDataCmdHeader: Custom message header for transparent port data , an example is \$\$DATA

Please notice : Please restart Gateway Server service if configuration file is changed.

Installation

- 1 . Stop Gateway Server by using Server Manager
2. Copy “libgpstran_client.ini” and “libgpstran_tclient.dll” to the {server installation directory}\bin
- 3 .Restart Gateway Server

Message Format

Status Message:

see Status data format section.

Alarm Message :

Status Message + Alarm Information

Transparent Port Data Message :

Status Message + transparent port data information

Status message format (Report ID=2)

Device ID, DateTime, Longitude, Latitude, Speed, Heading, Altitude, Satellite, Report ID, Mileage, Status, Analog port 1 (input 1), Temperature sensor1, Temperature sensor2, Temperature sensor3, Temperature sensor4, RFID#

Description

Device ID: The ID of the device. (length is 10 to 16 digits)

DateTime: YYYYMMDDhhmmss (From MDVR)

Longitude: WGS-84 coordinate system

Latitude: WGS-84 coordinate system

Speed: 0~65535 km/h

Heading: 0~360 degrees

Altitude: Parameter column Reserved (currently showing '0')

Satellite : -1 , this number is not available

Report ID: xxx. Different report ID indicates different meaning of each returning message, (For Tracking Set Report ID to 2)

Mileage: the mileage value in kilometer

Status : An integer number for device status , detail information please see Device Status section .

(Analog 1): Fuel (L) , this value is 0 if no sensor attached or firmware dose not support.

TempSensor1: Temperature Sensor1. 0 -- 0xFFFF

TempSensor2: Temperature Sensor2. 0 -- 0xFFFF

TempSensor3: Temperature Sensor3. 0 -- 0xFFFF

TempSensor4: Temperature Sensor4. 0 -- 0xFFFF

RFID : 0 for currently

: End flag between messages;

Example :

50000,20150623184513,113.828759,22.709578,70,190,0,-1,2,155135681,805327235,1.32,111,222,33
3,444,0#

Alarm message format (Report ID=3)

Alarm message has two parts , the first part is status data , indicate the gps and device status , and the second part is alarm data, two parts connected with “+,”

Example :

50000,20150623180210,113.827408,22.702954,61,185,0,-1,3,155086854,805327235,1.37,-111,2
22,333,444,0,+,132,0,0,16,858534705,741618482,4456|657,Reserve1,Reserve2#

Format of alarm part:

AlarmType, SubType, Parameter0, Parameter1, Parameter2, Parameter3, Description,Reserved1, Reserved2

AlarmType: An integer indicate the alarm type

SubType : Sub type of alarm if exists, or 0.

Parameter0-3 : Integer data of the alarm description, different alarm type has different meaning.

Description : Extra string data of alarm .

Reserverd1-2 : Reserved field for future use.

Transparent port data message format (Report ID=4)

Transparent port data message also has two parts , status part and transparent port data part , and connected with “+,”

Example :

50000,20150623184513,113.828759,22.709578,70,190,0,-1,4,155135681,805327235,1.32,111,2
22,333,444,0,+,0,15,11212357adfafaf#

Format for transparent port data:

Type,length,data

Type : An integer indicates transparent port data type

Length : length of the transparent port data.

Data : transparent port data

Heart Beats From Server

Server should reply following heartbeat to plugin, not more than 60 seconds.

\$\$hb,1#

If no heartbeat detected in 30 seconds, plugin will disconnect from server and try reconnect server once again.

Appendix

Device status

Status in message an integer, there are 32 bits for device status , bit values depends on the outer device attached.

Bit	Description	Value
0	GPS	0 invalid , 1 valid
1	Acc	0 off, 1 on
2	turn left	0 invalid , 1 turn left
3	turn right	0 invalid , 1 turn right
4	brake	0 invalid , 1 brake
5	forward	0 invalid , 1 forward
6	backward	0 invalid , 1 backward
7	GPS Antenna	0 dose not exist , 1 exists
8	HDD1	0 dose not exist, 1 exists
9	HDD2	0 dose not exist, 1 exists
10,11,12	3G Module Status	0 no 3g module, 1 no signal, 2 signal poor , 3 signal normal, 4 better 5 very good
13	vehicle is not moving	0 invalid , 1 not moving
14	overspeed	0 normal, 1 overspeed
15	gps data type	0 real time (currently) 1 delay (early data)
16	too low speed	1 too low speed (depends on settings)
17,18,19	not use	
20 .. 27	Io State	IO0—IO8 state , 0 low , 1 hight

28	HDD2 inavlid	0 invalid, 1 valid
29,39	HDD2 status	0 hdd2 dose not exists, 1 exists , 2 hdd2 power off
31	no used.	