

1. login and response example

1.1 login example

Command Type	Login
Original Data	24243F006A737274796336313030313233323030313730002001 0C00000023949B5002080B0C0B0E2C308CEF0B0E399802000 0B907BF00000000000293E0D0A
Data Analysis	
2424	protocol head (upload from terminal to call center)
3F00	The length of protocol package (the package length is 63 bytes.)
6A73727479633631303031323332303031373000	device id (jsrtyc6100123200170)
2001	command type (login command)
0C000000	TRIP ID (trip id is 12)
23949B50	RTCTIME (2012-11-8 11:14:43)
02	GPS flag (connected with g-mouse and disable privacy function)
080B0C0B0E2C308CEF 0B0E3998020000B907BF	GPS Data (see the following GPS data analysis for details)
00000000	VSTATE
00	New-Para-Flag (no parameter need to upload)
293E	CRC check sum
0D0A	protocol tail

1.2 Login response example

Command Type	Login response
Original Data	40402A0061336277617936313031313132393030323932001001 17000000FFFFFFFFFFFFFFFF7A29D0A
Data Analysis	
4040	protocol head (send from call center to terminal)
2A00	length of protocol package
6133627761793631303131313239303032393200	device id (a3bway6101112900292)
1001	command type (login response command)
17000000	Fixed package sequence number
FFFFFFFF	IP address ("0xFFFFFFFF" represents invalid IP address.)
FFFF	Port ("0xFFFF" represents invalid port.)
FFFF	Reserve field
7A29	CRC check sum
0D0A	protocol tail

2. Roll-call and response example

2.1 Roll-call example

Command Type	Roll-call
Original Data	40401E006133627761793631303131313239303032393200100267240D0A
Data Analysis	

4040	protocol head
1E00	length of protocol package
61336277617936313031 31313239303032393200	device id (a3bway6101112900292)
1002	command type (Roll-call command)
6724	CRC check sum
0D0A	protocol tail

2.2 Roll-call response

Command Type	Roll-call response
Original Data	2424360061336277617936313031313132393030323932002002020A0B0C0419 351E8BD60458B6721800000000030000000002E70D0A
Data Analysis	
2424	protocol head
3600	length of protocol package
61336277617936313031 31313239303032393200	device id (a3bway6101112900292)
2002	command type (Roll-call response command)
02	GPS flag (connected with g-mouse and disable privacy function)
0A0B0C0419351E8BD6 0458B672180000000003	GPS Data (see the following GPS data analysis for details)
00000000	VSTATE
293E	CRC check sum
0D0A	protocol tail

3. Logout example

Command Type	Logout
Original Data	24243A0061336277617936313031313132393030323932002003E5 E09D50020A0B0C05062D708AD60456B27218000000000300000 00000DC0D0A
Data Analysis	
2424	protocol head
3A00	length of protocol package
61336277617936313031 31313239303032393200	device id (a3bway6101112900292)
2003	command type (logout command)
E5E09D50	RTCTIME (2012-11-10 5:06:45)
02	GPS flag (connected with g-mouse and disable privacy function)
0A0B0C05062D708AD6 0456B272180000000003	GPS Data (see the following GPS data analysis for details)
00000000	VSTATE
293E	CRC check sum

0D0A	protocol tail
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4. Fixed upload example

Command Type	Fixed upload
Original Data	24249C006A737274796336313030313233323030313730002004 0B000000B5030000DC929B500000000001020108210D210C2105 210F210B2104211121100A01080B0C0B09110AEBEF0B787E97 0200000E06CF000C806E444C3A00056E000C7F6E444C3D0005 65000C806E444C38000571000C856F444C38000568000C846E4 44C3A00056E1CFACD1BF9CD1CFACD1BFACC1BFACC0000 000019100D0A
Data Analysis	
2424	protocol head
9C00	The length of protocol package (package length is 156 bytes.)
6A737274796336313030 31323332303031373000	device id (jsrtyc6100123200170)
2004	command type (fixed upload command)
0B000000	trip id (trip id is 11)
B5030000	Fixed package sequence number (Fixed package sequence number is 949.)
DC929B50	RTCTIME (2012-11-8 11:09:16)
00000000	trip mileage (0)
01	condition flag (condition data exists)
02	GPS flag (connected with g-mouse and disable privacy function)
01	g-sensor flag (G-Sensor data exists)
08	number of uploaded PID type
210D 210C 2105 210F 210B 2104 2111 2110	8 kinds of PID types
0A	length of each group of condition data package every 2 seconds
01	the number of GCG mixed package
080B0C0B09110AEBEF 0B787E970200000E06CF 000C806E444C3A00056E 000C7F6E444C3D000565 000C806E444C38000571 000C856F444C38000568 000C846E444C3A00056E	GPS data (see the following GPS data analysis for details) 5 groups of condition data every 2 seconds
1CFACD 1BF9CD 1CFACD 1BFACC 1BFACC	5 groups of G-Sensor data every 2 seconds
00000000	VSTATE
1910	CRC check sum

0D0A	protocol tail
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5. Vehicle supported PID types example

Command Type	Vehicle supported PID types
Original Data	242445006A737274796336313030313233323030313730002005 0C000000BB03000069939B500D21042105210B210C210D210F 211021112112211C211F21212123BF390D0A
Data Analysis	
2424	protocol head
4500	the length of protocol package (package length is 69 bytes.)
6A73727479633631303031323332303031373000	device id (jsrtyc6100123200170)
2005	command type (Vehicle supported PID types command)
0C000000	trip id (trip id is 12)
BB030000	Fixed package sequence number (Fixed package sequence number is 955.)
69939B50	RTCTIME (2012-11-8 11:11:37)
0D	total number of ECU supported PID types (supported 13 kinds of PID types)
2104 2105 210B 210C 210D 210F 2110 2111 2112 211C 211F 2121 2123	ECU supported PID types
BF39	CRC check sum
0D0A	protocol tail

6. Upload freeze frame data stream example

Command Type	Upload freeze frame PID
Original Data	2424E90061336277617936313031313132393030323932002006040000001 E00000033D69D50232102190021222103020001214F02000021040300FF2 10504006A21060500FF21070500C0210C08001F40210D070065210E0900 FF210F04008C21100A002328211103003321150D0038211F100001042121 1000010E2124130080D521521A00485A212E030000212F0300FF2130070 0002131100000002132140000002133070001213C15000190214216002EE0 214317000000214413000000214503000F21470300FF2149030000214A030 000214C03000E214D18000000214E18000000C9F70D0A
Data Analysis	
2424	protocol head
E900	length of protocol package
6133627761793631303131313239303032393200	device id (a3bway6101112900292)
2006	command type (Upload freeze frame data stream command)
04000000	Trip id (4)
1E000000	Fixed package sequence number (30)

33D69D50	RTCTIME (2012-11-10 4:21:07)
23	Number of freeze frame data stream
2102 1900 2122 2103 0200 01 214F 0200 00 2104 0300 FF 2105 0400 6A 2106 0500 FF 2107 0500 C0 210C 0800 1F40 210D 0700 65 210E 0900 FF 210F 0400 8C 2110 0A00 2328 2111 0300 33 2115 0D00 38 211F 1000 0104 2121 1000 010E 2124 1300 80D5 2152 1A00 485A 212E 0300 00 212F 0300 FF 2130 0700 00 2131 1000 0000 2132 1400 0000 2133 0700 01 213C 1500 0190 2142 1600 2EE0 2143 1700 0000 2144 1300 0000 2145 0300 0F 2147 0300 FF 2149 0300 00 214A 0300 00 214C 0300 0E 214D 1800 0000 214E 1800 0000	35groups of freeze frame data stream Each group of freeze frame data stream structure is as following. “PID type (2 bytes) + arithmetic number (2 bytes) + data (variable length)”. (See PID definition for details.)
C9F7	CRC check sum
0D0A	protocol tail

7. Upload PID data stream info example

Command Type	Upload PID info
Original Data	242473006A737274796336313030313233323030313730002007 0C000000BC0300006A939B5047000D210403003A2105040070

	210B07004C210C08000C7B210D070000210F04004421100A00 0562211103000021120B0004211C0E0006211F100004C6212110 000000212312000BD6FF850D0A
Data Analysis	
2424	protocol head
7300	the length of protocol package (package length is 115 bytes.)
6A737274796336313030 31323332303031373000	device id (jsrtyc6100123200170)
2007	command type (Upload PID data stream info command)
0C000000	trip id (12)
BC030000	fixed package sequence number (956)
6A939B50	RTCTIME (2012-11-8 11:11:38)
4700	The length of PID data stream info. (The following PID data stream length is 71 bytes.)
0D	total number of ECU supported PID types (supported 13 kinds of PID types)
2104 0300 3A	The 1st kind of PID data stream info. Its structure is "PID type (2 bytes) + arithmetic number (2 bytes) + data stream (variable length)". See the attached PID definition for details.
2105 0400 70	The 2nd kind of PID data stream info. (see the above description)
210B 0700 4C	The 3rd kind of PID data stream info. (see the above description)
210C 0800 0C7B	The 4th kind of PID data stream info. (see the above description)
210D 0700 00	The 5th kind of PID data stream info. (see the above description)
210F 0400 44	The 6th kind of PID data stream info. (see the above description)
2110 0A00 0562	The 7th kind of PID data stream info. (see the above description)
2111 0300 00	The 8th kind of PID data stream info. (see the above description)
2112 0B00 04	The 9th kind of PID data stream info. (see the above description)
211C 0E00 06	The 10th kind of PID data stream info. (see the above description)
211F 1000 04C6	The 11th kind of PID data stream info. (see the above description)
2121 1000 0000	The 12th kind of PID data stream info. (see the above description)
2123 1200 0BD6	The 13th kind of PID data stream info. (see the above description)
FF85	CRC check sum
0D0A	protocol tail

8. Upload STORE malfunction info example

Command Type	Upload STORE malfunction info
Original Data	24242B006A737274796336313030313233323030313730002008 0C000000BE0300006A939B500053E60D0A
Data Analysis	
2424	protocol head
2B00	The length of protocol package (package length is 43 bytes.)
6A737274796336313030 31323332303031373000	device id (jsrtyc6100123200170)
2008	command type (Upload STORE malfunction info)

0C000000	trip id (12)
BE030000	fixed package sequence number (958)
6A939B50	RTCTIME (2012-11-8 11:11:38)
00	0x00 represent that there is no malfunction.
53E6	CRC check sum
0D0A	protocol tail

9. Upload PENDING malfunction info

Command Type	Upload PENDING malfunction info
Original Data	24242B006A737274796336313030313233323030313730002009 0C000000BD0300006A939B5000BE4E0D0A
Data Analysis	
2424	protocol head
2B00	The length of protocol package (package length is 43 bytes.)
6A73727479633631303031323332303031373000	device id (jsrtyc6100123200170)
2009	command type (Upload PENDING malfunction info)
0C000000	trip id (12)
BD030000	fixed package sequence number (957)
6A939B50	RTCTIME (2012-11-8 11:11:38)
00	0x00 represent that there is no malfunction.
BE4E	CRC check sum
0D0A	protocol tail

10. Upload alarm and Upload alarm elimination

10.1 Upload alarm

Command Type	Upload alarm
Original Data	24244E006A73727479633631303031323332303031373000200A 0C000000E10300009D949B506A10000002080B0C0B102E363D F00B0AC999020E0D9301BF0400000004000000790078001686 0D0A
Data Analysis	
2424	protocol head
4E00	The length of protocol package (package length is 78 bytes.)
6A73727479633631303031323332303031373000	device id (jsrtyc6100123200170)
200A	command type (Upload alarm)
0C000000	trip id (12)
E1030000	fixed package sequence number (993)
9D949B50	RTCTIME (2012-11-8 11:16:45)
6A100000	trip mileage (4202 m)
02	GPS flag (connected with g-mouse and disable privacy function)

080B0C0B102E363DF0 0B0AC999020E0D9301BF	GPS Data (see the following GPS data analysis for details)
04000000	VSTATE (existed over-speed state)
04000000	Alarm identifier field (triggered over-speed alarm)
7900	Current value, 2 bytes (current speed is 121 km/h)
7800	Threshold value, 2 bytes (threshold value of over-speed is 120 km/h)
1686	CRC check sum
0D0A	protocol tail

10.2 Upload alarm elimination

Command Type	Upload alarm elimination
Original Data	24244E006A73727479633631303031323332303031373000200B 0C0000000604000002969B50B644000002080B0C0B162BF2E2F 10B4874A402980CCC01AF00000000040000006F007800FE6C 0D0A
Data Analysis	
2424	protocol head
4E00	The length of protocol package (package length is 78 bytes.)
6A737274796336313030 31323332303031373000	device id (jsrtyc6100123200170)
200B	command type (Upload alarm elimination)
0C000000	trip id (12)
06040000	fixed package sequence number (1030)
02969B50	RTCTIME (2012-11-8 11:22:42)
B6440000	trip mileage (17590 m)
02	GPS flag (connected with g-mouse and disable privacy function)
080B0C0B162BF2E2F1 0B4874A402980CCC01AF	GPS Data (see the following GPS data analysis for details)
00000000	VSTATE (there is no any state.)
04000000	Alarm identifier field (eliminated over-speed alarm)
6F00	Current value, 2 bytes (current speed is 111 km/h)
7800	Threshold value, 2 bytes (threshold value of over-speed is 120 km/h)
FE6C	CRC check sum
0D0A	protocol tail

11. Trip Start and Trip End

11.1 Trip start

Command Type	Trip start
Original Data	242447006A73727479633631303031323332303031373000200C 0C000000B903000069939B50983BC0130602080B0C0B0B25BC EAEF0B487E970200002306BF0000000084300D0A
Data Analysis	

2424	protocol head
4700	The length of protocol package (package length is 71 bytes.)
6A737274796336313030 31323332303031373000	device id (jsrtyc6100123200170)
200C	command type (trip start command)
0C000000	trip id (12)
B9030000	fixed package sequence number (953)
69939B50	RTCTIME (2012-11-8 11:11:37)
983BC013	Vehicle Readness data
06	Supported ECU protocol type - CAN11__500K
02	GPS flag (connected with g-mouse and disable privacy function)
080B0C0B0B25BCEAEF 0B487E970200002306BF	GPS Data (see the following GPS data analysis for details)
00000000	VSTATE (there is no any state.)
8430	CRC check sum
0D0A	protocol tail

11.2 Trip end

Command Type	Trip end
Original Data	24244A006A73727479633631303031323332303031373000200D 0B000000B8030000E6929B5000000000000000002080B0C0B0 91BF2EAEF0B607E970200000E06CF00000000D81D0D0A
Data Analysis	
2424	protocol head
4A00	The length of protocol package (package length is 74 bytes.)
6A737274796336313030 31323332303031373000	device id (jsrtyc6100123200170)
200D	command type (trip end command)
0B000000	trip id (11)
B8030000	fixed package sequence number (952)
E6929B50	RTCTIME (2012-11-8 11:09:26)
00000000	Total trip mileage is 0 m.
00000000	Total trip fuel consumption is 0 l.
02	GPS flag (connected with g-mouse and disable privacy function)
080B0C0B091BF2EAEF 0B607E970200000E06CF	GPS Data (see the following GPS data analysis for details)
00000000	VSTATE (there is no any state.)
D81D	CRC check sum
0D0A	protocol tail

12. Special data field analysis example

12.1 GPS Data example

Data Field	GPS Data (19 bytes)
Original Data	080B0C0B091BF2EAEF0B607E970200000E06CF
Data Analysis	
080B0C	Date (08/11/2012)
0B091B	Time (11:09:27)
F2EAEF0B	Latitude (55.631285 °)
607E9702	Longitude (12.078533 °)
0000	Speed (0 km/h)
0E06	Direction (155.0 °)
CF	GPS state word (east longitude/north latitude/3D locate/12 satellites)