

themassacre dot org presents

トウルー・プリミティブ メッセジング・プロトコル

True Primitive Messaging Protocol
とても簡単な話のプロトコル



I LIED, IT'S MADE IN RUSSIA
COPYRIGHT TWORJOK 2015

Introduction

The True Primitive Messaging Protocol (TPMP) is intended to be a very simple, minimal IRC-like chatting protocol, developed as a part of ambitious «медведЧат» project, JUST BECAUSE I CAN.

Unfortunately, it's actually not so True Primitive as it would be. The draft specification is drawn on a picture below.

True Primitive	メト
Messaging Protocol	ツウ
TPMP	セル
	ヅ
client ^{TCP} → server	ソ.
message format:	グフ
1 byte - header	・リ
7 6 5 4 3 2 1 0	フミ
1: text, 0: other	トイ
command etc. 1v	コマンド等 1v
0: just a message	0: just a message
2 byte - payload length (big endian ushort)	2 byte - payload length (big endian ushort)
... - payload	...
FOO	FOO
HARD	HARD
not primitive enough	

If you feel it is informative enough, you can give up reading this trash and start coding right now.

Connection

TPMP uses canonical client-to-server TCP connection model. Forget all these «IRC networks», otherwise it wouldn't be called True Primitive.

Messages

Client and server can send a message in any time. Message have the following format:

```
-----  
| header (byte) | payload length (big endian uint16) | payload (...) |  
-----
```

The header byte format:

```
-----  
| 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |  
| command | payload type |  
-----
```

Payload types

1	Text
0	Other shit

Commands

Header's command value determines an action that recipient have to do with payload. Depending on it, the payload may carry various data schemes.

Outcoming messages (to server)

	Description	Payload format
0	No action (just a text message)	[<text>]
1	Login	<nickname>
2	Private message	<destination_nickname>[\n<text>]
3	Userlist request	

Incoming messages (from server)

	Description	Payload format
32	System notification	[<text>]
33	Text message	[<sender_nickname>\n<text>]
34	Userlist (response)	[<nickname>{\n<nickname>}]

Charset

Text format is UTF-8. Nicknames cannot contain chars from the «technical» range (0x0 – 0x1f).

General rules

- User is unable to send messages to others, until telling his nickname once via Login command;
- User can change nickname by sending Login again;
- Multiple users with same nicknames is not allowed.

Message flow

- Server have to send received messages to all connected and logged-in users, even back to the sender;
- Private messages must be only delivered to it's sender and the recipient.