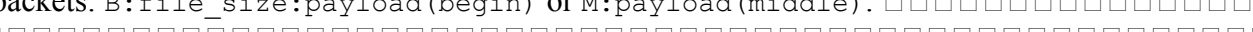




1. request packets: R: requested\_file\_name: other packet, other packets could either be data packets or nil packets. if R: : other packet, this means no file is being requested. If no data, the other packet should be a nil packet(N:).
2. data packets: B: file\_size: payload(begin) or M: payload(middle). 

The diagram shows a data packet structure. It starts with a header containing 'B: file\_size:' followed by a box for the file size, and 'M: payload(middle)' followed by a box for the payload type. Below the header is a large box representing the payload, which is divided into two sections: 'payload(begin)' and 'payload(middle)'.
3. nil packets: N:, used when there is no data to transfer, only instruction is transferred.
4. end packets: E:, this packet is sent to end a connection when the transfer is finished.
5. pending packets: P: the packet is sent when the file is not ready, almost equivalent to nil packet.

```
struct Order {
    int order_id;
```

```
int price;
int volume;
unsigned char combined;
}__attribute__((packed));

combined = stk_code << 4 | (direction == 1?1:0) << 3 | typeprice100
(3int + lunsigned char) / (4int + ldouble)=13/24

$21.19min * 13/24 = 11.47min$ ZSTD C++
58%

$11.47min*58% = 6.66min$

31.4%

3.

50050,$0.2%$.

tradertradertrader
Trade

g++ merge_cuo.cpp -o merge_cuo -O2
./merge_cuo

hookmap<int, special_info> special_hook[10];
prev_price

chunksiz=1e6order_info
map < pair<int, int>, int > bids[10], asks[10];

if (type == 0) {
    // limit order
    // is invalid
    if (price > prev_high[stk_code]) return -1;
    if (price < prev_low[stk_code]) return -1;
    return price;
}
if (type == 1) {
    //
    return (dir == 1)? get_best_ask(): get_best_bid();
}
if (type == 2) {
    //
    return (dir == 1)? get_best_bid(): get_best_ask();
}
if (type == 3) {
    // ,
    quota = inf;
    isLeave = false;
    return (dir == 1)? get_best_ask(): get_best_bid();
}
if (type == 4) {
    //
    quota = inf;
    isLeave = false;
    return (dir == 1)? get_best_ask(): get_best_bid();
}
if (type == 5){
```

--	--	--	--	--	--

- 



□ □ □ □

**Exchange**

11

stream transfer 9Mbps file-

```

price    int                                     double    $0-$    stk_code unsigned char
trade    $24$    $17$

```