## Protocol

1. Protocol Header

| Header portion |  | Data portion |  |
| :--- | :--- | :--- | :--- |
| Code(1Byte) | Size 1/2 Byte | Protocol number (1Byte) | Data(Size-Header size) |

## Code :

- $0 \times C 1$ : If the size is configured as one byte (the packet size including the data is within 256)
- $0 \times \mathrm{C} 2$ : If Size is configured as a Doubt (packet size including data is less than 65536)

Size :

- Contains the size of the packet. (Header + Data)

Protocol Number :

- It is the protocol number of actual data. This number identifies which protocol the data is.
- If it is $0 \times F F$, the data is extended with additional number.

Protocol Number ( $0 \times 00 \sim 0 \times E F$ ) are used for frequently used messages and $0 \times F 0-0 \times F F$ are not used as subconcepts.

Data :
Contains actual protocol data.
[0x40] Party [0x50] Guild

| SC [0xF1][0x00] If you try to connect to the connection server, you will be notified of the connection result. |  |  |
| :--- | :--- | :--- |
| Result | 1 Byte | $0 \times 00:$ It is possible to connect normally. <br> The client should not proceed until the client receives this message. |
| NumberH | 1 Byte | Authentication number upper byte |
| NumberL | 1 Byte | Authentication number low byte |
| CliVersion | 3 Byte | If $(0.31)$ is $0,3,1$ |


| CS [0xF1] [0x01] After inputting the account ID and password, request the connection. (Encrypt all <br> entries) | $0 \times C 3$ |  |  |
| :--- | :--- | :--- | :--- |
| ID | 10 Byte |  |  |
| Pass | 10 Byte |  |  |
| TickCount | DWORD | Tells the current client time. (The value obtained from GetTickCount ()) |  |
| CliVersion | 3Byte | Client version information is sent in 3 bytes. |  |


| SC [0xF1] [0x01] And informs the client of the processing result of the account connection. |  |  |
| :---: | :---: | :---: |
| Result | 1Byte | 0x01: Success <br> $0 \times 02$ : No ID or password. <br> $0 \times 03$ : This is the ID you are using. <br> $0 \times 04$ : I can not connect because of the maximum user is exceeded. <br> $0 \times 05$ : It has been disabled. <br> $0 \times 06$ : The client version is not correct. Please install the latest version. <br> $0 \times 07$ : Connection error. <br> $0 \times 08$ : Connection will be terminated automatically in case of failure of 3 times. <br> 0x09: No billing information <br> $0 \times 0 \mathrm{~A}$ : Your personal fixed time has expired. <br> $0 \times 0 \mathrm{~B}$ : Your personal quantitative time has expired. <br> $0 \times 0 \mathrm{C}: \mathrm{IP}$ fixed time has expired. <br> $0 \times 0 \mathrm{D}$ : The IP metering time has expired. <br> 0x0E: Attempting to connect operator .. (??) <br> $0 \times 0 \mathrm{~F}$ : Operator is processing character <br> 0xD0 : Point Date: Expiration of use time <br> 0xD1: Point time system: Expiration date (there are no points left) <br> $0 \times 11$ : It is a server that can be used by 15 years old or older. |



| CS | [0x03] The client sends the code to the server. This is the client's call! |  | 0xC3 |
| :---: | :---: | :---: | :---: |
| Flag | 1 Byte | $0 \times 00$ : The protocol sent from the server is not encrypted. termination) <br> 0x01: Checking for leaving the background screen (do not hang) <br> $0 \times 02$ : Variable manipulated to exit the background (do not hang) <br> 0x03 : Trying to replace main.exe while running (does not hang) <br> $0 \times 04$ : Attempt to rename the hacking program | ection |


| SC [0xF1][0x10] Send server list to client |  |  |
| :--- | :--- | :--- |
| Total | BYTE | Number of servers |
| Total The following data is repeated. |  |  |
| Number | BYTE | Server number (absolute number) |
| Name | 30 Byte | Name of each server |
| Address | 30 Byte | Server address |
| Port | SHORT | Server Port Number |
| Count | SHORT | Number of users on the server |


| CS [0xF1][0x11] Request to connect to the selected game server |  |  |
| :--- | :--- | :--- |
| Number | BYTE | Game server number |

- This part is a protocol between a monster server and a game server

CS [0xF1] [0x30] Monster creation request (One user space must be allocated from game server.)

| Index | BYTE | Monster number |
| :--- | :--- | :--- |
| Level | BYTE | Monster Level |
| MapNumber | BYTE | Map number to connect to |


| SC [0xF1] [0x30] Monster connection request result |  |  |
| :--- | :--- | :--- |
| Result | BYTE | Result <br> $0 \times 00:$ Failed to create <br> $0 \times 01:$ Success |
| NumberH | BYTE | Monster number upper byte in game server |
| NumberL | BYTE | Monster number lower byte on game server |

Use in character selection, creation and deletion interface


Create a character

| CS [0xF3][0x01] Request to create character |  |  | OxC1 |
| :--- | :--- | :--- | :--- |
| ID | 10Byte | ID |  |
| ClassSkin | 1Byte | Race 4Bit / Skin 4Bit |  |

Str, Dex, Vir, Energy Etc. use the basic information of the character.

| SC [0xF3][0×01] Character Creation Results |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- |
| Result | 1 Byte | $0 \times 00:$ False <br> $0 \times 01:$ True <br> $0 \times 02: ~ Y o u ~ c a n ~ n o ~ l o n g e r ~ c r e a t e ~ c h a r a c t e r s . ~$ |  |
| Name | 10 Byte | Character name |  |
| Pos | 1 Byte | Where the character was created |  |
| Equipment | 24 Byte | Characters equipped (12 * 2) |  |


| CS [0xF3][0x02] Request character deletion |  |  | 0xC1 |
| :--- | :--- | :--- | :--- |
| Name | 10Byte | Character ID to be deleted |  |
| JoominNumber | 8Byte | Back of resident registration number including NULL |  |


| SC [0xF3][0x02] Character deletion result | $0 \times C 1$ |  |
| :--- | :--- | :--- | :--- |
| Result | 1 Byte | $0 \times 00:$ False <br> $0 \times 01:$ True <br> $0 \times 02:$ The resident registration number does not match the back digit. |


| CS [0xF3][0x03] Request map entry with selected character |  |  |  |  |  |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Name | 10 Byte | The character ID (encryption) |  |  |  |  |  |  |


| SC [0xF3][0x03] Tell the client to connect to the map. | OxC3 |  |
| :--- | :--- | :--- | :--- |
| X | 1Byte | X Coordinates (unit: tile) |
| Y | 1Byte | Y Coordinates (unit: tile) |
| MapNumber | 1Byte | Map number |
| Dir | 1Byte | The direction the character is looking (from 0 to 7) |
| Exp | 4Byte | Experience |
| NextExp | 4Byte | Next experience |
| LevelUpPoint | 2Byte | Level Up Points <br> (Fixed 2 Bytes from 1 Byte 2002-04-25) |
| Str | 2Byte | Power |
| Dex | 2Byte | Agility |
| Vitality | 2Byte | Health |
| Energy | 2Byte | Energy |
| Life | 2Byte | Current Life |
| LifeMax | 2Byte | Maximum Life |
| Mana | 2Byte | Currently |
| ManaMax | 2Byte | The maximum amount of mana |
| Money | 4Byte | The amount of money the character has |
| PKLevel | 1Byte | Player's PK level |
| CtlCode | 1Byte | Character control code |


| SC [0xF3][0x04] When a character dies and resurrected, he tells his location. |  |  | 0xC3 |
| :--- | :--- | :--- | :--- |
| $X$ | 1Byte | X Coordinates (unit: tile) |  |
| $Y$ | 1Byte | Y Coordinates (unit: tile) |  |
| MapNumber | 1Byte | Map number |  |
| Dir | 1Byte | The direction the character is looking (from 0 to 7) |  |
| Life | 2Byte | Current life |  |
| Mana | 2Byte | Currently Mana |  |
| Exp | 4Byte | Current Experience |  |
| Money | 4Byte | Added money 2002-07-04 |  |


| SC [0xF3][0x05] The character has leveled up. |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| Level | 2Byte | Character Level |  |
| LeveupPoint | 2Byte | Number of points when level up <br> (Modified from 1 Byte to 2 Bytes 2002-04-25) |  |
| MaxLife | 2 Byte | When the level is up, the vitality is full. (It is sent as a float multiplied by 10.) |  |
| MaxMana | 2Byte | Mana is full when you level up. (It is sent as a float multiplied by 10.) |  |


| CS [0xF3][0x06] The user raised a level-up point. |  |  |  |  |  |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Type | 1 Byte | $0:$ Power |  |  |  |  |  |  |
|  |  | $1:$ Agility |  |  |  |  |  |  |
|  | $2:$ Health |  |  |  |  |  |  |  |
|  | $3:$ Energy |  |  |  |  |  |  |  |


| SC [0xF3][0x06] If the user uploads a level-up point, the result is sent. |  |  | 0xC1 |
| :---: | :---: | :---: | :---: |
| Result\&Type | 1 Byte | 4Bit : Result <br> 4Bit : 0 : Power <br> 1 : Agility <br> 2 : Health <br> 3 : Energy |  |
| MaxLife\&Mana | 2Byte | When you raise a point, the changed hea a float). | ent as |


| SC [0xF3][0x07] Damage Decrease |  |  |  |  |  |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| DamageH | 1 Byte | Damaged Value High Byte |  |  |  |  |  |  |
| DamageL | 1 Byte | Damaged Value Lower Byte |  |  |  |  |  |  |


| SC [0xF3][0x08] PK_Level |  |  |  |  |  |  |  | 0xC1 |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| NumberH | 1Byte | Pk_Level Setting user upper byte |  |  |  |  |  |  |
| NumberL | 1Byte | Pk_Level Setting user low byte |  |  |  |  |  |  |
| PK_Level | 1Byte | Damaged value high byte |  |  |  |  |  |  |


| SC [0xF3][0x10] Items stored in the character's inventory. |  |  |  |
| :--- | :--- | :--- | :--- |
| Count | 1 Byte | If the counter is 0, there is nothing (no next message) |  |
| The following is repeated as much as the count. |  |  |  |
| Pos | 1Byte | Location from inventory |  |
| ItemInfo | 3Byte | Each item information |  |


| SC [0xF3][0x11] Magic Wizard List |  |  |  |
| :--- | :--- | :--- | :--- |
| Count | 1Byte | If magic number is 0, delete one, add more | $0 \times \mathrm{C} 1$ |
| Count Repeat as many times as |  |  |  |
| Pos | 1Byte |  |  |
| MagicInfo | 2Byte | 8Bit $=$ Type, 5Bit $=$ Level, 3Bit $=$ skill |  |


| CS [0xF3][0x12] Informs the server that the data loading is complete when moving the map. |
| :--- |
| The server then sends the viewport-related data to this user. |

(This message is sent when the device of another player in the view port is changed)

| SC [0xF3][0x13] Equipment information from other players | $0 \times C 1$ |  |  |
| :--- | :--- | :--- | :--- |
| NumberH | 1Byte | Player with device information High byte |  |
| NumberL | 1Byte | Player low byte with device information |  |

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| Equipment | 8Byte | Same as when creating a viewport. |  |
| :--- | :--- | :--- | :--- |
| SC [0xF3][0x14] Edit your character's inventory item info | $0 \times C 1$ |  |  |
| Pos | 1Byte | Location from inventory |  |
| ItemInfo | 3Byte | Each item information |  |


| SC [0xF3][0x20] Stamina of the monster summoned by the fairy (percent) |  |  |  |  |  |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Life | 1 Byte | If it is 0, it disappears (1-100) |  |  |  |  |  |  |


| SC [0xF3][0x22] Displays the time. (Combat football) | $0 \times C 1$ |  |
| :--- | :--- | :--- |
| Second | 2Byte(word) | Display remaining time (seconds) Client displays X minutes X seconds |


| SC [0xF3][0x23] 축구 정보 |  |  |  |
| :--- | :--- | :--- | :--- |
| RedTeamName | 8Byte | Red team name | $0 \times \mathrm{Cl} 1$ |
| RedTeamScore | 1Byte | Red Team Score |  |
| BlueTeamName | 8Byte | Blue team name |  |
| BlueTeamScore | 1Byte | Blue team score |  |

/ Game registration [guild name]
$(0 \times 52)$ on the guild list. And receives a list of competitors from the client.
(Operator only)

| CS [0xF3][0x24] List to participate in soccer game |  |  |  |  |  |  |  | $0 \times C 2$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Team | 1 Byte | $0:$ Red Team <br> $1:$ Blue Team |  |  |  |  |  |  |
| Count | 1 Byte | Number of players to participate in the match |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Name | 10 Byte | Name |  |  |  |  |  |  |
| Number | 1 Byte | Guild member number |  |  |  |  |  |  |

Inside the game

- Conversation

Use for conversation, whisper, group conversation, family conversation, call...

| CS/SC [0x00] Conversations in viewports |  |  |  |  |  |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| ID | 10 Byte | ID |  |  |  |  |  |  |
| Chat | 60 Byte | Conversation contents |  |  |  |  |  |  |


| CS/SC [0x011 Conversations in viewports ( |  |  |  |
| :--- | :--- | :--- | :--- |
| NumberH | 1 Byte | User number from which the message was sent Upper byte | OxC1 |
| NumberL | 1 Byte | User number from which the message was sent. |  |
| Chat | 60 Byte | Conversation contents |  |


| CS [0x02] Whisper to the specified user |  |  | OxC1 |
| :--- | :--- | :--- | :--- |
| Target ID | 10 Byte | Partner ID |  |
| Chat | 60 Byte | Conversation contents |  |


| SC [0x02] Another user whispered. |  |  | OxC1 |
| :--- | :--- | :--- | :--- |
| Target ID | 10 Byte | Partner ID |  |
| Chat | 60 Byte | Conversation contents |  |



| CS [0x03] Sends a client EXE checksum along with the primary key. |  | $0 \times C 3$ |
| :--- | :--- | :--- |
| CheckSum | 4 Byte |  |


| SC [0x0C] 서버로부터의 메시지 |  | OxC1 |
| :--- | :--- | :--- | :--- |
| MsgNumber | 1 Byte | $0:$ Whisper The person you requested does not exist. |
|  |  | $1:$ I got a party. |
|  |  | $2:$ refused the party. |
|  |  | $3:$ The party people are full. |
|  | $4:$ You are already in the party. |  |
|  |  |  |


|  | $5:$ I'm out of the party. |
| :--- | :--- | :--- |
|  | $10:$ I joined the guild. |
|  | $11:$ Guild members are full. |
|  | $12:$ You are already on the guild. |
|  | $13:$ You left the guild. |
|  | $14:$ The guild who is asking for war is already in war. |
|  | $15:$ There is no guild master who requested war. |


| SC [0x0D] Notice |  | $0 \times \mathrm{C} 1$ |  |
| :--- | :--- | :--- | :--- |
| Type | 1 Byte | Notification type |  |
|  |  | $0:$ Bottom notice |  |
|  |  | $1:$ Left Server Message |  |
|  | $2:$ Guild Notice |  |  |
| Notice | String | Notice (NULL terminated string) MAX: 256 |  |

$0 \times 0 E$ Always sends a message to the server telling the client that it is connected. If there is no response within 30 seconds, the server considers it to be terminated.

| CS [0x0E] User access check notification | $0 \times \mathrm{C} 3$ |  |
| :--- | :--- | :--- | :--- |
| TimeCount | DWORD | Send data to the server once every 30 seconds to synchronize the time with the <br> server. <br> If the time is very different, the connection is blocked (regarded as a speed <br> nuclear user) |
| BootsLevel | 1 Byte | Sends the level of the boots. |
| SC [0x0F] Weather change   <br> Weather 1 BYTE 4Bit weather - 0: normal, 1: rain, 2: snow <br> 4Bit change (intensity) - 0 is very weak, 15 is very high. |  |  |

- Character creation and movement processing
-- [Path] --
Each consists of 4 bits, and the direction, number, and the rest contain the Path table number to move in order.


Path table

| Table <br> number | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Increase | $-1,-1$ | $0,-1$ | $1,-1$ | 1,0 | 1,1 | 0,1 | $-1,1$ | $-1,0$ |


Examples of using tables in games

| $-1,-1(0)$ | $-1,0(7)$ | $-1,1(6)$ |
| ---: | :---: | :---: |
| $0,-1(1)$ |  | $0,1(5)$ |
| $1,-1(2)$ | $1,0(3)$ | $1,1(4)$ |

Tile location number as seen in figure

| CS [0x10] It sends its moving tile coordinates. |  |  |  |
| :--- | :--- | :--- | :--- |
| $X$ | 1 Byte | Tile start X coordinate | $0 \times C 1$ |
| $Y$ | 1 Byte | Y coordinate of tile start |  |
| Path | 8 Bytes variable | Tile number to move |  |

Server : Movement is limited to three times per second and ignored.

| SC [0x10] Tile coordinates of someone else |  |  |  |
| :--- | :--- | :--- | :--- |
| NumberH | 1 Byte | Absolute number of user's upper byte | $0 \times C 1$ |
| NumberL | 1 Byte | Absolute number of user lower byte |  |
| $X$ | 1 Byte | Tile X coordinate |  |
| $Y$ | 1 Byte | Y coordinate of tile |  |
| Path | 8 Bytes variable | Tile number to move |  |


| CS [0x11] Location setting |  |  |  |  |  |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| $X$ | 1 Byte | Tile start $X$ coordinate |  |  |  |  |  |  |
| $Y$ | 1 Byte | Tile start $Y$ coordinate |  |  |  |  |  |  |


| SC [0x11] Set other object (person or NPC or monster) location |  |  |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- | :---: | :---: |
| NumberH | 1 Byte | Absolute number of user's upper byte |  |  |  |
| NumberL | 1 Byte | Absolute number of user lower byte |  |  |  |
| $X$ | 1 Byte | Tile X coordinate |  |  |  |
| $Y$ | 1 Byte | Tile Y coordinate |  |  |  |


| SC [0x12] Tells you that another character has entered the viewport. |  |  |  |
| :--- | :--- | :--- | :--- |
| Count | 1 Byte | Number of repetitions | $0 \times C 2$ |
| The following is repeated for Count. |  |  |  |
| NumberH | 1 Byte | The user's absolute number upper byte (if the most significant bit is 1, the <br> character is generated, if 0, the existing user) |  |
| NumberL | 1 Byte | Absolute number of user lower byte |  |
| $X$ | 1 Byte | Tile X coordinate |  |
| $Y$ | 1 Byte | TileY coordinate |  |

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| Equipment | 8 Byte | ```4Bit (Class 3Bit / Skin 1Bit) + 4Bit (ViewAction) + Right Hand Weapon (1Byte) + Left Hand Weapon (1Byte) + Remaining Equipment (3Byte by 4bit) + Level (3Byte) ViewAction: (the action each takes when entering the viewport) Basic Create space movement sitting Leaning``` |
| :---: | :---: | :---: |
| ViewState | 1 Byte | User visible state variable (Bit processing) <br> 1 st bit: character green change (poisoning damage) <br> 2nd bit: character blue change (ice) <br> 3rd beat: Show fairy damage increase <br> 4th bit: Fairy Defense Increase Mark <br> 5th bit: <br> 6th bit: <br> 7th bit: <br> 8th bit: |
| ID | 10 Byte | User id |
| TX | 1 Byte | $X$ coordinate to move |
| TY | 1 Byte | Y coordinate to move |
| Dir\&PkLevel | 1Byte | Direction 4Bit: PkLevel: 4Bit |


| SC [0x13] Announces that the monster is inside the viewport. |  |  | 0xC2 |
| :---: | :---: | :---: | :---: |
| Count | 1 Byte | Number of repetitions |  |
| The following is repeated for Count. |  |  |  |
| NumberH | 1 Byte | Monster absolute number upper byte (if the most significant bit is 1 , character is generated, if 0 , existing monster) |  |
| NumberL | 1 Byte | Monster absolute number lower byte |  |
| ViewState | 1 Byte | User visible state variable (Bit processing) <br> 1 st bit: character green change (poisoning damage) <br> 2nd bit: character blue change (ice) <br> 3rd beat: Show fairy damage increase <br> 4th bit: Fairy Defense Increase Mark <br> 5th bit: <br> 6th bit: <br> 7th bit: <br> 8th bit: |  |
| Level | 1 Byte | level |  |
| X | 1 Byte | $X$ coordinate of tile |  |
| Y | 1 Byte | Y coordinate of tile |  |
| Path | 8 Byte(가변 | If it is in transit, the moving tile numbers |  |


| SC [0x14] Tells you that another character has been removed from the viewport. | $0 \times C 1$ |  |
| :--- | :--- | :--- | :--- |
| Count | 1 Byte | Number of repetitions |
| The following is repeated for Count. |  |  |
| NumberH | 1 Byte | Absolute number of user's upper byte |
| NumberL | 1 Byte | Absolute number of user lower byte |


| CS $[0 \times 15]$ Normal attack |  |  |  |
| :--- | :--- | :--- | :--- |
| NumberH | 1Byte | Attacked user index top | $0 \times \mathrm{C} 1$ |
| NumberL | 1 Byte | Attacked user index child |  |
| AttackAction | 1 Byte | Attack action number |  |
| Dir\&Dis | 1 Byte | Direction \& Attack of the character |  |

Notify other players in the viewport with the [0x18] protocol.

- If the attack is successful and the attack is successful, the result is reported

| SC $[0 \times 15]$ Result of attack |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| NumberH | 1 Byte | The user index upper byte that was attacked (if the most significant bit is 0, <br> 1 is the result of a magic attack and is not linked to any action.) |  |
| NumberL | 1 Byte | The user index lower byte that was attacked (if you are the attacker yourself) |  |
| DamageH | 1 Byte |  |  |

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$\left\lvert\,$| DamageL | 1Byte |  |
| :--- | :--- | :--- |
| SC [0x16] If you kill someone (to the attacking user)   <br> NumberH 1Byte Dead Object Index Top <br> NumberL 1Byte Dead Object Index Child <br> ExpH 1 Byte Earned experience <br> ExpL 1Byte Gained Experience <br> DamageH 1Byte Attacked value top <br> DamageL 1Byte Attacked value sub |  |  | |  |
| :--- |\right.


| SC [0x17] If someone is dead (to all viewport users), if the number is himself, he is dead. |  |  |  |
| :--- | :--- | :--- | :--- | 0xC1 9.


| CS [0x18] Notify server to take special action |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| Dir | 1 Byte | Direction (for position compensation) |  |
| ActionNumber | 1Byte | Action number |  |


| SC [0x18] Notify everyone in Viewport that other players have taken special action |  |  |  |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| NumberH | 1Byte | Absolute number of user |  |  |  |  |
| NumberL | 1Byte | User's absolute number sub |  |  |  |  |
| Dir | 1Byte | Direction (for position compensation) |  |  |  |  |
| ActionNumber | 1Byte | Action number |  |  |  |  |


| CS [0x19] A magical attack on a specific opponent |  |  | $0 \times \mathrm{C} 3$ |
| :--- | :--- | :--- | :--- |
| MagicNumber | 1 Byte | Magic number |  |
| NumberH | 1 Byte | Target Absolute number of user |  |
| NumberL | 1 Byte | Absolute number of target user |  |
| Dis | 1 Byte | Attack distance |  |


| SC [0x19] Magical attack result against opponent |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| MagicNumber | 1 Byte | Magic number |  |
| SourceH | 1 Byte | Absolute number of attacking user |  |
| SourceL | 1 Byte | Absolute number of attacking user |  |
| TargetH | 1 Byte | Target Absolute number of user |  |
| TargetL | 1 Byte | Absolute number of target user |  |


| CS [0x1A] Magical Attack in a Specific Location | OxC1 |  |  |
| :--- | :--- | :--- | :--- |
| MagicNumber | 1Byte | Magic number |  |
| MapX | 1Byte | Magical X-coordinate |  |
| MapY | 1Byte | Magical Y coordinate |  |


| SC $[0 \times 1 \mathrm{~A}]$ Results for ranged magic attacks |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| NumberH | 1 Byte | User number of magic attack upper byte |  |
| NumberL | 1 Byte | User number of magic attack Lower byte |  |
| MagicNumber | 1 Byte | Magic number |  |
| X | 1 Byte | Magical X-coordinate |  |
| Y | 1 Byte | Magical Y coordinate |  |
| Count | Byyte | Enchanted user, Monster, NPC, etc $\ldots$ |  |

Count Repeat as many times as

| NumberH | 1Byte | Right user, monster, NPC, etc. High byte |
| :--- | :--- | :--- |
| NumberL | 1 Byte | Right user, monster, NPC, etc. Lower byte |


| SC [0x1B] Disable on continuous magic | 0xC1 |  |  |
| :--- | :--- | :--- | :--- |
| MagicNumber | 1 Byte | Magic number |  |
| NumberH | 1 Byte | User number to be released High byte |  |
| NumberL | 1 Byte | User number to be released Lower byte |  |


| CS [0x1C] Enable space travel | $0 \times \mathrm{C} 3$ |  |  |
| :--- | :--- | :--- | :--- |
| MoveNumber | 1 Byte | $0:$ If you move using space magic <br> 1 Move gate from |  |
| MapX | 1Byte | Map X coordinate |  |

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| MapY | 1Byte | Y coordinate of map |
| :--- | :--- | :--- |

When moving between maps, the server does not process the viewport related data but resumes the 0xF3 0x12 protocol as it arrives.

| SC [0x1C] Space movement result |  |  | $0 \times \mathrm{C} 3$ |
| :--- | :--- | :--- | :--- |
| MoveNumber | 1Byte | Mobile number |  |
| MapNumber | 1Byte | Map number |  |
| MapX | 1Byte | Map X |  |
| MapY | 1Byte | Map Y |  |
| Dir | 1Byte | Direction of character |  |

The following are used in the case of persistent magic.

| CS [0x1D] Another character was attacked by my attack. |  |  |  |
| :--- | :--- | :--- | :--- |
| MagicNumber | 1Byte | Magic Number (What magic did you get?) | $0 \times \mathrm{C} 1$ |
| $X$ | 1 Byte | Attacked X coordinate |  |
| $Y$ | 1Byte | Attacked Y coordinate |  |
| Count | 1Byte | Number of attacked users (maximum five can not be exceeded) |  |
| Count The following is repeated |  |  |  |
| NumberH | 1Byte | Attacked user index top |  |
| NumberL | 1Byte | Attacked user index child |  |

In the case of persistent magic (whirlwind), the client checks for a crash and sends out the user who has been damaged. The server checks the location to see if it is nearby and tells it that it was attacked. When it is reported that an attack has been done, write $0 \times 15$, and set the most significant bit to 1 to indicate that it is being attacked.

| CS [0x1E] Continuous magic fire |  |  | $0 \times \mathrm{C} 3$ |
| :--- | :--- | :--- | :--- |
| MagicNumber | 1 Byte | Magic number |  |
| $X$ | 1 Byte | Use magic $X$ |  |
| $Y$ | 1 Byte | Use magic $Y$ |  |
| Dir | 1 Byte | Magic Direction |  |


| SC [0x1E] Continuous magic firing by other players | $0 \times C 1$ |  |  |
| :--- | :--- | :--- | :--- |
| MagicNumber | 1 Byte | Magic number |  |
| NumberH | 1 Byte | Other users with magic high byte |  |
| NumberL | 1 Byte | Other users lower byte with magic |  |
| $X$ | 1 Byte | Use magic X |  |
| $Y$ | 1 Byte | Use magic Y |  |
| Dir | 1 Byte | Magic Direction |  |


Item

| SC [0x20] Item created in viewport | $0 \times C 2$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Count | 1Byte |  |  |
| The rest is repeated as much as Count. |  |  |  |
| NumberH | 1Byte | Item index upper (If the most significant bit is 1, if it is 0, existing item) |  |
| NumberL | 1Byte | Item index sub |  |
| $X, Y$ | 2Byte | X(1Byte), Y(1Byte) |  |
| Itemlnfo | nByte | If the first byte is (15 * 16) (15 is money and 16 is the maximum number of items), <br> n is a total of 4 bytes, and the second byte to the third byte is LOBYTE I HIBYTE I <br> LOBYTE represents the amount. <br> The next two bytes are the following information. <br> Item information (8bit I 5bit I 3bit) <br> 8Bit = Type, 5Bit = Level, 3Bit = Durability) |  |


| SC [0x21] The item has disappeared from the viewport (it is also used when someone else eats it). | $0 \times C 2$ |
| :--- | :--- | :--- | | Count | 1Byte | Number of items disappearing from the viewport |
| :--- | :--- | :--- |


| The rest is repeated as much as Count. |
| :--- |
| NumberH |
| 1Byte | Item Index Top


| CS [0x22] Request to pick up items |  | $0 \times \mathrm{C} 3$ |  |
| :--- | :--- | :--- | :--- |
| NumberH | 1Byte | Item index high (if the most significant bit is 0 , the inventory window is closed; if <br> 1, it is open) |  |
| NumberL | 1 Byte | Item index sub |  |


| SC [0x22] Requested to pick items | $0 \times \mathrm{C} 3$ |  |
| :--- | :--- | :--- | :--- |
| Result | 1Byte | 0xFE is money <br> 0xFF is an error (0xFF, there is no next 4 bytes) <br> Other inventory locations |
| Money <br> Itemlnfo$\&$ | 4Byte | If Result is FE, then the amount of money in BYTE of money <br> When it is not FF, it has 2 bytes of item information. (Subtract 2 bytes and send) |


| CS [0x23] Item Drop Request |  |  | OxC3 |
| :--- | :--- | :--- | :--- |
| $X$ | 1Byte | X position in map |  |
| $Y$ | 1Byte | Y position in map |  |
| Ipos | 1Byte | Location in Inventory |  |


| SC [0x23] Item Drop Result |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- |
| Result | 1Byte | If $0 \times 00$ is a failure, $0 \times 01$ is a success |  |
| Ipos | 1 Byte | Location in inventory (delete) |  |


| CS [0x24] | Attach ite | ove requests (weapons, armor, gloves, boots, necklaces, rings, etc.) | $0 \times C 3$ |
| :---: | :---: | :---: | :---: |
| SitemFlag | 1 Byte | 0: inventory, 1: trade window, 2: warehouse, 3: mixer window |  |
| SitemNum | 1 Byte | Source item |  |
| SitemInfo | 3Byte | Source item Info |  |
| TitemFlag | 1 Byte | 0: inventory, 1: trade window, 2: warehouse, 3: mixer window |  |
| TitemNum | 1Byte | Target item |  |


| SC [0x24] The result of mounting your own items | $0 \times \mathrm{C} 3$ |  |  |
| :--- | :--- | :--- | :--- |
| Result | 1Byte | Fail if 0xFF <br> Inventory location if 0x00 <br> 0x01, the transaction window location <br> Warehouse location if 0x02 |  |
| Pos | 1Byte | Location in each |  |
| ItemInfo | 3Byte | Item Info |  |


| SC [0x25] Another person changed clothes. |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| NumberH | 1 Byte | Others index upper byte |  |
| NumberL | 1 Byte | Others index Iower byte | Item Information Type (1Byte) + Equipment Location (4Bit) + Level (4Bit) <br> Type is $255(-1)$ when the equipment is released. |
| ItemInfo | 2 Byte |  |  |


| CS [0x26] Use Item |  | 0xC3 |  |
| :--- | :--- | :--- | :--- |
| Ipos | 1 Byte | Location in the item inventory you want to use |  |
| Target | 1 Byte | Use for target item if it is a jewelry series |  |


| SC [0x26] Life Settings.. |  |  | OxC1 |
| :--- | :--- | :--- | :--- |
| Ipos | 1 Byte | Inventory location used If it is 0xFF, it is a general life setting and the other is the <br> position in the inventory. OxFE is the MaxLife setting. If it is 0xFD, the item use <br> failure. Occurs when there is no item or a problem occurs |  |
| LifeH | 1 Byte | Current Life High Byte |  |
| LifeL | 1 Byte | Current Life low byte |  |
| Flag | 1 Byte | 0: Normal life recovery from the server. <br> $1:$ Results for client input. (Event activation) |  |


| SC [0x27] Mana setting |  |  | OxC1 |
| :--- | :--- | :--- | :--- |
| Ipos | 1 Byte | Inventory location used If it is 0xFF, it is the normal Mana setting and the other is <br> the position in the inventory. |  |
| ManaH | 1 Byte | Current Mana high byte |  |
| ManaL | 1 Byte | Current Mana Lower Byte |  |


| SC [0x28] <br> Remove items from a specific location in your inventory | $0 \times C 1$ |  |
| :--- | :--- | :--- | :--- |
| Pos | 1 Byte | Item inventory locations (0xFF is sent if there is an error when learning the <br> spellbook) |
| Flag | 1 BYte | $0:$ It is a common delete sent by the server. <br> $1:$ Result for client input. (Activate event) |

// 0x29 Do not

## CS [0x29]

$0 x C 1$
O

Notification of special ability use time due to use of item
$\square$

| SC [0x2A] Item durability |  |  |  |
| :--- | :--- | :--- | :--- |
| IPos | 1Byte | Item Iocation in inventory | $0 \times C 1$ |
| Dur | 1Byte | Item durability |  |


| SC [0x2B] Add item at specific location in inventory |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- |
| Pos | 1Byte | Location of inventory and equipment windows |  |
| ItemInfo | 3Byte | Item information |  |

Character-to-Character and Trade Shops

| CS $[0 \times 30]$ Ask a character to speak to you. |  |  |  |  |  |  |  | $0 \times \mathrm{C} 3$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| NumberH | 1 Byte | The absolute number on which you spoke |  |  |  |  |  |  |
| NumberL | 1 Byte | Absolute number spoken down |  |  |  |  |  |  |


| SC [0x30] Notify the merchant that you are talking. (Launch store interface) |  |  | $0 \times \mathrm{C} 3$ |
| :--- | :--- | :--- | :--- |
| Type | 1Byte | What shop? |  |
| $0 \times 00$ : Any shop that only has a buy or sell button |  |  |  |
| $0 \times 01$ : Any store (weapon shop / defense shop, etc.) with buy, sell, or repair buttons |  |  |  |
| $0 \times 02$ : Warehouse style |  |  |  |

Send the above protocol and send the list of products in the store directly.

| SC [0x31] Shop \& Warehouse List |  |  | $0 \times \mathrm{C} 2$ |
| :--- | :--- | :--- | :--- |
| Count | 1Byte |  |  |
| Count As long as the following is repeated. |  |  |  |
| Pos | 1Byte | Store inventory Iocation of the item |  |
| ItemInfo | 3Byte | Item Information (Same as Basic Item Information) |  |

## Stuff Scams

| CS [0×32] Buy things from the store. | $0 \times \mathrm{C} 3$ |  |  |
| :--- | :--- | :--- | :--- |
| ShopItemPos | 1Byte | Item location in the store |  |


| SC [0x32] 샀을때 결과 |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| Result | 1Byte | 0xFF : Fail <br> Other values are added to the user inventory... . |  |

If the goods scam is successful, the server and the client deduct the amount of money.

## Selling stuff

| CS [0x33] Selling stuff |  | $0 \times \mathrm{C} 1$ |  |
| :--- | :--- | :--- | :--- |
| UserItemNum | 1Byte | User inventory item location number |  |

* Internal processing: The user is like throwing away something, but the difference is that the server gives money.

| SC [0x33] The result of selling goods |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| Result | 1 Byte | 0 Success 1 |  |
| Money | 4 Byte | If the result is a success, the amount received is more than that. |  |

## Repair

| CS [0x34] Repair |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- |
| UserltemNum | 1 Byte | User inventory item location number | $0 \times C 1$ | | SC [0x34] Repair results | Zero is a failure. <br> If it is more successful, we deduct money because it is a success. |  |
| :--- | :--- | :--- |
| Money | 4Byte |  |

Close the store exchange window
CS [0x35] Inform the store that the window will be closed when bartering between the user or the user. 0 0xC1

| SC [0x35] You can also close the window. | $0 \times \mathrm{C} 1$ |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
| CS [0x36] Ask someone to exchange things. | $0 \times C 3$ |  |  |  |
| NumberH | 1Byte | User absolute number top byte to exchange things |  |  |
| NumberL | 1Byte | User absolute number subbyte to exchange things |  |  |

- After sending the message, the client prints out the message "In exchange request", and then the $0 \times 37$
message is sent to the transaction.

| SC [0x36] A character asks you to exchange things. | $0 \times \mathrm{C} 3$ |  |  |
| :--- | :--- | :--- | :--- |
| NumberH | Byte | The absolute number of the user who wants to exchange things |  |
| NumberL | 1Byte | User's absolute number sub-byte to exchange things |  |


| szld | 10Byte | ld |
| :--- | :--- | :--- |

- When requested, the message box will be displayed to inform you whether you will respond to the exchange.

| CS [0x37] <br> exchange) |  |  |
| :--- | :--- | :--- | :--- |
| Response | 1 Byte will respond to the exchange of things, you will be informed. (To users who wanted to | $0 \times C 1$ |


| SC [0x37] The user who suggested to exchange things will be informed of the results again. |  |  |  |  |  |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Response | 1 Byte | $0 \times 00:$ Cancel, |  |  |  |  |  |  |
|  |  | $0 \times 01:$ Ok |  |  |  |  |  |  |
|  |  | $0 \times 02:$ It is an in inter changeable situation. |  |  |  |  |  |  |
|  |  | $0 \times 03:$ Waiting for an exchange request. |  |  |  |  |  |  |
| ID | 10Byte | Relative ID |  |  |  |  |  |  |

- OK If the mesh is coming, print out the interchange window and start the exchange.

| SC [0x38] | The item has been removed from the other party's exchange window. | 0xC1 |
| :---: | :---: | :---: |

Exchangelndex 1 Byte $\quad$ Relative exchange window index number

| SC [0x39] The other party placed the item in the exchange window. |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| ExchangeIndex | 1Byte | Relative exchange window index number |  |
| ItemInfo | 3Byte | Item information |  |


| CS [0x3A] Put the money in the exchange window. | $0 \times \mathrm{C} 1$ |  |
| :--- | :--- | :--- |
| Money | 4Byte | Amount of money to put in the exchange window |


| $[0 \times 3 A]$ The result of putting money in the exchange window |  |  |  |  |  |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Result | 1Byte | $0 \times 00:$ Fail <br> $0 \times 01:$ Success |  |  |  |  |  |  |


| SC [0x3B] The other party put the money in the exchange window. | $0 \times C 1$ |  |  |
| :--- | :--- | :--- | :--- |
| Money | 4Byte | The amount of the opponent's exchange window |  |


| CS [0x3C] Confirmation (expressed your intention to exchange) | $0 \times \mathrm{C} 3$ |  |  |
| :--- | :--- | :--- | :--- |
| Flag | 1 Byte | $0 \times 00:$ Unconfirm <br> $0 \times 01:$ Check |  |

-No one can change the exchange window at the same time as pressing the check button (Flag: 0x00). Press the check button again (Flag:0x01) to change the exchange window again.

| SC [0x3C] The other party pressed the OK button. (Confirmation button status) |  |  | $0 \times \mathrm{C} 1$ |
| :---: | :---: | :---: | :---: |
| Flag | 1 Byte | 0x00: OK <br> 0x01: Uncheck <br> 0x02: Inn oua for a while (the opponent took window -warning -) <br> 0x03: Unexchanging status for a while | change |

If both are pressed with a check button (Flag:0x00), the server will distribute the items exchanged by each. The sharing protocol uses $0 \times 22$. If a $0 \times 22$ message came from the server, put it in your inventory.

| CS [0x3D] During the barter, the user pressed the cancel button. All exchanges will be cancelled. |
| :--- |
| SC [0x3D] 거래 결과    <br> Result 1Byte 0x00: The opponent has cancelled the deal. <br>  $0 \times 01:$ Deal completed (the transaction was successfully completed)  <br>   <br>  $0 \times 02:$ The deal did not complete normally. <br>  $0 \times 03:$ The transaction request has been cancelled. |


| SC [0x3E] The other party deletes the item in the interchange window |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| Exchangelndex | 1Byte | Relative exchange window index number |  |
| ItemInfo | 3Byte | Item information |  |

## [0x40] Party

| CS $[0 \times 40]$ Ask the other party for a party. | $0 \times \mathrm{C} 1$ |  |  |
| :--- | :--- | :--- | :--- |
| NumberH | 1Byte | Upper byte supper number of opponents who want to form a party |  |
| NumberL | 1Byte | The number subbyte of the other party you want to party with |  |



| CS [0x41] You will party with your opponent. |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
| Result | 1Byte | $0 \times 00: I ' m$ not going to party <br> $0 \times 01:$ Yes, come into my party. |  |
| NumberH | 1Byte | Upper byte supper number of opponents who want to form a party |  |
| NumberL | 1Byte | The number subbyte of the other party you want to party with |  |



A message is also sent to $0 \times 0 \mathrm{C}$.


| SC [0x42] Send a list of party members. |  |  |  |
| :--- | :--- | :--- | :--- |
| Result | 1Byte | Ox00 $:$ I am not a member of the party. | $0 \times \mathrm{C} 1$ |
| Count | 1 Byte | If you are a party member, the number of party members |  |
|  |  |  |  |
| Name | 10Byte | The name of the party member |  |
| Number | 1Byte | Party Member No. |  |
| MapNumber | 1Byte | Map No. |  |
| $X$ | 1Byte | X coordinates on the map |  |
| $Y$ | 1Byte | Y coordinates on the map |  |


| CS [0x43] Remove from the party. |  | $0 \times C 1$ |  |
| :--- | :--- | :--- | :--- |
| Number | 1 Byte | Users who want to leave the party |  |
|  |  |  |  |


| SC [0x45] Tells the other character that they're in the viewport. (Transformed user) |  |  | 0xC2 |
| :---: | :---: | :---: | :---: |
| Count | 1 Byte | Number of iterations |  |
| The following is repeated as much as Count. |  |  |  |
| NumberH | 1 Byte | User's absolute number top byte <br> (If the top-level bit is 1 , the character is created, and 0 is the user who existed) |  |
| NumberL | 1 Byte | User's absolute number subbyte |  |
| X | 1 Byte | Tile $X$ coordinates |  |
| Y | 1 Byte | Tile Y coordinates |  |
| Skin | 1 Byte | Transformed skin image number |  |
| ViewAction | 1 Byte | Actions taken when entering the viewport <br> 0 : Default <br> 1 : Create space movement <br> 2 : Sitting <br> 3 : Leaning <br> 4: <br> 5: |  |
| ViewState | 1 Byte | User visible state variable (Bit processing) <br> 1st Bit: Character Green Change (Poisoning Damage) <br> 2nd Bit: Character Blue Change (Ice) <br> 3rd Bit: Show increased fairy damage <br> Fourth bit: Increased defensive ness <br> Fifth bit: <br> Sixth bit: <br> Seventh bit: <br> Eight bit: |  |
| ID | 10 Byte | User Aadi |  |
| TX | 1 Byte | $X$ coordinates to move |  |
| TY | 1Byte | Y coordinates to move |  |
| Dir\&PkLevel | 1 Byte | Direction 4Bit : PkLevel : 4Bit |  |

[0x50] Guild

| CS $[0 \times 50]$ Ask the guild master to join the guild. |  |  |  |
| :--- | :--- | :--- | :--- |
| NumberH | 1Byte | Guild master Number Higher Bytes | OxC1 |
| NumberL | 1 Byte | Guild master number sub-bytes |  |


| SC [0x50] The other party has asked you to join the guild. (I have a chat window asking if I'm going to join or not) |  |  | $0 \times C 1$ |
| :---: | :---: | :---: | :---: |
| NumberH | 1Byte | The other party number you want to join is the top byte |  |
| NumberL | 1Byte | The other party number sub-byte you want to join |  |


| CS [0x51] Announce whether you are allowed to join a guild. |  |  |  |
| :--- | :--- | :--- | :--- |
| Result | 1Byte | $0 \times 00:$ Syre <br> $0 \times 01:$ Ok | $0 \times \mathrm{C} 1$ |
| NumberH | 1Byte | The number of the person you want to join the top byte |  |
| NumberL | 1Byte | The number subbyte of the other party you want to join |  |


$0 \times 0 \mathrm{Ca}$ message is also sent.

| CS [0x52] Ask them to show a list of guild members. |  |  | $0 \times \mathrm{C} 1$ |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
| SC [0x52] Send a list of guild members. | $0 \times \mathrm{C} 2$ |  |  |
| Result | 1Byte | $0 \times 00:$ You are not a member of a guild. <br> $0 \times 01:$ Use as a list of match registrations |  |
| Count | 1Byte | If you are a member of a guild, you |  |
| TotalScore | 4Byte | Guild cumulative score |  |
| Score | 1Byte | Score when you're in a war |  |
|  |  |  |  |
| Name | 10Byte | Name |  |
| Number | 1Byte | Guild Member No. |  |
| Connect\&Server | 1Byte | Whether you are connecting to the top-level bit, the remaining server numbers |  |


| CS [0x53] I want to be excluded (withdrawn) from a guild |  |  | 0xC1 |
| :--- | :--- | :--- | :--- |
| Name | 10Byte | Users who withdraw from guild |  |
| JoominNumber | 7Byte | When you are a master, ask for your social security number. |  |


| SC [0x53] He was withdrawn from the guild. (Delete the list) | $0 \times \mathrm{C} 1$ |  |  |
| :--- | :--- | :--- | :--- |
| Result | 1Byte | $0 \times 00$ : The social security number is incorrect. |  |
|  |  | $0 \times 01:$ Left (excluded) from the guild. |  |
|  |  | $0 \times 02$ : Only guild masters can delete it. |  |
|  |  | $0 \times 03:$ Unsubscribe failure |  |
|  |  | $0 \times 04:$ The guild has been removed. |  |

When you request a conversation with the master. If you qualify as a guild master.
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| SC [0x54] Ask if you want to be a guild master |  | OxC1 |  |
| :--- | :--- | :--- | :--- |
| CS [0x54] Answer a question you asked if you would be a guild master | 0xC1 |  |  |
| Result | 1 Byte | $0 \times 00:$ Syre <br> $0 \times 01:$ You like |  |



| CS [0x55] Complete guild manager (attempt to request guild creation) | $0 \times \mathrm{C} 1$ |  |  |
| :--- | :--- | :--- | :--- |
| GuildName | 8Byte | Guild Name |  |
| Mark | 32Byte | Guild Mark |  |


|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |


| Result | Byte | $0 \times 00:$ Guild name exists (re-enter guild name) |
| :--- | :--- | :--- |
|  |  | $0 \times 01:$ A guild was created. |
|  |  | $0 \times 02:$ Guild names must be two or more to eight characters. (Guild name) |
|  |  | $0 \times 03:$ You already belong to a guild. | $0 \times 03$ : You already belong to a guild.



The following is a minimal packet by sending information to only the guild's own personnel with the information generated in the viewport creation.
Primarily, the client tables the guild's information and updates it every time it receives the guild information.
$0 \times 12$ After the message, $0 \times 5 \mathrm{~A} 0 \times 5 \mathrm{~B}$ is sent in turn.

| SC [0x5A] Guild information in viewport (additional concepts) |  |  | 0xC2 |
| :---: | :---: | :---: | :---: |
| Count | 1 byte | Number |  |
| NumberH | 1Byte | Guild number top bytes |  |
| NumberL | 1 Byte | Guild number sub-bytes |  |
| Name | 8Byte | Guild Name |  |
| Mark | 32Byte | Guild Mark |  |


| [0x5B] People who belong to guilds in viewport (additional concept) |  |  | 0xC2 |
| :---: | :---: | :---: | :---: |
| Count | 1 byte | Number |  |
| NumberH | 1Byte | Top user number |  |
| NumberL | 1Byte | User number sub |  |
| GNumberH | 1Byte | Top Guild Number |  |
| GNumberL | 1Byte | Guild Number Sub |  |

The following is reflected directly in the viewport at the time you joined the guild. Number H/L can be your own.

| SC [0x5C] Someone in the viewport joined the guild. | $0 \times 2$ |  |  |
| :--- | :--- | :--- | :--- |
| NumberH | 1Byte | User number upper byte |  |
| NumberL | 1Byte | User number subbyte |  |
| Name | 8Byte | Guild Name |  |
| Mark | 32Byte | Guild Mark |  |


| SC [0x5D] Someone in the viewport has withdrawn from the guild. |  |  | $0 \times C 2$ |
| :--- | :--- | :--- | :--- |
| NumberH | Byte | User number upper byte |  |
| NumberL | Byyte | User number subbyte |  |

/War [Guild Name]
declare war on the guild.
/Battle Soccer [Guild Name]

| SC [0x60] 전쟁을 선포한 후 결과 |  |  | $0 \times \mathrm{C} 1$ |
| :---: | :---: | :---: | :---: |
| Result | 1Byte | $0 \times 00$ : Opponent guilds do not exist. <br> $0 \times 01$ : Declared war on opponents guilds. <br> $0 \times 02$ : The master of the opposing guild did not connect. <br> $0 \times 03$ : I am not a guild member. <br> $0 \times 04$ : We cannot declare war. <br> $0 \times 05$ : Guild members cannot declare war. <br> $0 \times 06$ : The request for war was rejected. |  |


| SC [0x61] Another guild declared war. Will you go to war? | 0xC1 |  |  |
| :--- | :--- | :--- | :--- |
| GuilldName | 8Byte | Guild Name |  |
| Type | Byte | Form of war |  |
|  |  | $0:$ Guild Wars |  |
|  |  | $1:$ Guild Battle Soccer |  |


| CS [0x61] Consequences for requests to declare war |  |  | $0 \times C 1$ |
| :--- | :--- | :--- | :--- |
| Result | 1 Byte | 0x00: War Sherre <br> $0 \times 01:$ War! |  |


| SC [0x62] Inform all guild members on both sides of the war. <br> (Declare war with $x \times$ guild) | $0 \times C 1$ |  |
| :--- | :--- | :--- |
| GuildName | 8Byte | Other guild names |
| Type | 1Byte | Form of war |
| TeamCode | 1Byte | O: RED team <br> $1:$ BLU |


| SC [0x63] Inform all guild members on both sides of the war of war. |  |  | $0 \times C 1$ |
| :---: | :---: | :---: | :---: |
| Result | 1 Byte | $0 \times 00$ : Battle ends with victory of enemy guild <br> $0 \times 01$ : End the battle with the victory of our guild <br> $0 \times 02$ : The enemy guild's master has quit and won the war. <br> $0 \times 03$ : The Master of Our Side Guild ended and lost the battle. <br> $0 \times 04$ : Victory in war with the dismantling of enemy guilds <br> $0 \times 05$ : Defeated by the dissolution of our guilds |  |
| GuildName | 8Byte | Guild name (sends different guild names) |  |


| SC [0x64] Guild Score | $0 \times C 1$ |  |  |
| :--- | :--- | :--- | :--- |
| Score1 | 1 Byte | Our team scores |  |
| Score2 | Byyte | Opponent's score |  |
| Type | 1 Byte | Form of war |  |


| SC [0x70] Lucky Box Open |  |  |  |  |  |  |  |  | OxC1 |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Money | 4Byte | Lucky box open when lucky amount |  |  |  |  |  |  |  |  |

## Warehouse (starting at $0 \times 80$ ).

1. The user speaks to the Warehouse NPC (Roncia 147/145). CS ( $0 \times 30$ : Talk to NPC) SC ( $0 \times 30$ : Receive Store Type)
2. The game server obtains the warehouse data of its user account from the data server. DS: [0x08]
3. The item information obtained from the data server is converted and sent to the user. SC (0x31: store list)
4. The user removes or loads the item.
5. Remove money or put money ( $0 \times 81,0 \times 81$ )
6. Close the warehouse. ( $0 \times 83$ )

| CS [0x81] Deposit or withdraw money. |  |  |  |
| :--- | :--- | :--- | :--- |
| Type | 1 Byte | 0: Deposit, 1: Withdrawal | 0xC1 |
| Money | 4 Byte | Amount |  |


| SC [0x81] 돈을 업데이트 시킨다. |  |  |  |
| :--- | :--- | :--- | :--- |
| Result | 1Byte | $0:$ Failure, $1:$ Success | $0 \times \mathrm{C} 1$ |
| Wmoney | 4Byte | Warehouse amount |  |
| SC [0x81] updates the money. | $0 \times C 1$ |  |  |
| Result | 1Byte | $0:$ Failure, $1:$ Success |  |
| Wmoney | 4Byte | Warehouse amount |  |
| Imoney | 4Byte | Inventory amount |  |


| CS [0x82] Request that you finish using the warehouse | $0 \times C 1$ |
| :---: | :---: |



Chaos Box (starting at 0x86)

1. Use item movement, such as $0 \times 24$ (move items in inventory)

