SubSpace Billing Protocol

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The information contained in this document was collected from my reverse-engineering efforts and from the ASSS source code (written by Grelminar).

User Login Status

0	Login OK
1	New User
2	Invalid Password
3	Login Banned
4	No new connections
5	Bad username
6	Demo user
7	Server busy
8	Ask demographics

Message Type

1	Arena Message
2	Remote Private Message

Biller to Subgame

```
Player Login Response
01
   <responseCode (1)>
   <connectionId (4)>
   <playerName (24)>
   <squadName (24)>
   <banner (96)>
   <totalSecondsPlayed (4)>
   <creationYear (2)>
    <creationMonth (2)>
   <creationDay (2)>
   <creationHour (2)>
   <creationMinute (2)>
   <creationSecond (2)>
   <unused:0 (4)>
    <userId (4)>
    <unused:0 (4)>
       <wins (2)>
       <losses (2)>
       <goalCount (2)>
       <points (4)>
        <flagPoints (4)>
```

Shutdown Zone

02

Zone Message

Sends a message to the entire zone or a Remote Private message to a specific user/squad if message has the form :TargetName:(From)>message

```
<sourceServerId (4)>
  <type (1)>
  <sound:2 (1)>
  <message (asciiZ)>
Recycle Zone
04
File Transfer
  <filename (asciiZ, 16)>
  <fileData (?)>
Invalid Packet
06
Invalid Packet
07
```

Kick Player

```
08
  <connectionId (4)>
  <reason (2)>
Arena Message
Sends a green arena message to the specified user
09
  <connectionId (4)>
  <message (asciiZ)>
Chat Channel Message
Sends a red channel message to the specified user from the given channel #
0A
  <connectionId (4)>
  <channel# (1)>
  <message (asciiZ)>
Score Reset
31
  <scoreId (4)>
  <negScoreId (4)>
User Packet
32
  <connectionId (4)>
  <data (?)>
```

```
Billing Identity
  <IDData (128)>
Multicast Channel Chat
34
  <count (1)>
  {
     <connectionId (4)>
     <channel# (1)>
  } * count
  <message (asciiZ)>
Subgame to Biller
Ping
01
Server Connect
  <serverID (4)>
  <groupID (4)>
  <scoreID (4)>
  <serverName (126)>
  <serverPort (2)>
  <password (32)>
Server Disconnect
User Login
  <makeNew (1)>
  <ipAddress (4)>
  <name (32)>
  <password (32)>
```

<connectionID (4)>
<machineID (4)>
<timezone (2)>
<unused:0 (2)>
<bankelated? (1)>

```
<sysop (1)>
  <cli>clientVersion (2)>
  <cli>clientData (64)>
User Logout
  <connectionID (4)>
  <disconnectReason (2)>
  <latency (2)>
  <ping (2)>
  <plossS2C (2)>
  <plossC2S (2)>
  <wins (2)>
  <losses (2)>
  <goalCount (2)>
  <points (4)>
  <flagPoints (4)>
Remote Zone Message
Sends a message to the server specified by ServerID
06
  <connectionId (4)>
  <serverID (4)>
  <type (1)>
  <sound (1)>
  <message (asciiZ)>
User Remote Private Chat
The user wants to send a remote private message (this is of the form
:TargetName:(from)>message or :#SquadName:(from)>message)
  <connectionID (4)>
                          - this field is usually 0xFFFFFFF presumably because the source
name is contained in (from)
  < groupID (4) >
  <type (1)>
  <sound (1)>
  <message (asciiZ)>
Request File
  <filename (asciiZ)>
Invalid Packet
09
Invalid Packet
Invalid Packet
Invalid Packet
```

```
User Demographics
```

```
This packet doesn't seem to get forwarded by subgame for a non-SSC server.
```

```
<connectionID (4)>
  <data (765)>
```

User Private Chat

The user wants to send a message from srcConnectionId to destConnectionId (NOTE: unless the message starts with '*', the message was already delivered)

```
<srcConnectionId (4)>
  <destConnectionId (4)>
  <message (asciiZ)>
Log Security Violation
  <connectionID (4)>
  <message (asciiZ)>
User Banner
10
  <connectionID (4)>
  <banner (96)>
User Score
11
  <connectionID (4)>
  <wins (2)>
  <losses (2)>
  <goalCount (2)>
  <points (4)>
  <flagPoints (4)>
```

User Score Message

The user wants to send a message to all the zones with the given scoreID

```
<connectionID (4)>
  <scoreID (4)>
  <type (1)>
  <audio:0 (1)>
  <message (asciiZ)>
```

User Command

The user sent a ?command

```
<connectionID (4)>
  <message (asciiZ)>

User Channel Chat
14
```

<connectionID (4)>
<channel# (32)>

```
<message (asciiZ)>
```

Server Capabilities

15

<capFlags (4)> - low bit is 'multicast supported', all other bits unused