**User Registration Server:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Action** | **Opcode** | **Request** | **Response** | **Type** |
| Check Server | 0x00 | Opcode (1 byte) | Opcode + (0x00 for closed or 0x01 for open) | Pull |
| Register User | 0x01 | Opcode + Requested user name (max 256 bytes) | (Fail) Opcode + 0x00 + Error message  (Success) Opcode + UUID + Group IP + Port Number (25 bytes) | Pull |
| Deregister User | 0x02 | Opcode + UID  (17 bytes) | (Fail) Opcode + 0x00 + Error Message  (Success) Opcode + 0x01 (2 bytes) | Pull |
| Ready | 0x03 | Opcode + UUID (17 bytes) | None | Pull |
| Not Ready | 0x04 | Opcode + UUID (17 bytes) | None | Pull |

**Game Server:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Action** | **Opcode** | **Request** | **Response** | **Type** |
| Question | 0x00 | 0x00 + Question ID + Answers UUID (16\*4 bytes) + CSV String | 0x00 + Group IP + UUID | Push |
| Buzzer | 0x01 | 0x01 + Group IP + UUID | 0x01 | Pull |
| Buzzer Query | 0x02 | 0x02 | 0x02 + Group IP + UUID + Time Stamp | Push |
| Allow Answer | 0x03 | 0x03 + UUID (17 bytes) | 0x03 + Group IP + UUID + Answer UUID + Time Elapsed | Push |
| Answer Correct | 0x04 | 0x04 + UUID + points (0 points mean wrong answer) | 0x04 + Group IP + UUID | Push |
| Start/Unfreeze | 0x05 | 0x05 | 0x05 + Group IP + UUID | Push |
| Times Up | 0x06 | 0x06 + Group IP + UUID | 0x06 + UUID | Pull |
| Leave Game | 0x07 | 0x07 + Group IP + UUID | 0x07 + UUID | Pull |
| Get Scores | 0x08 | 0x08 + Group IP + UUID | 0x08 + UUID + points | Pull |