

Update 023 Avatar Movement

Author: Aleksi Asikainen (sanct@furcadia.com)
Last Update: 2007-12-28
Scope: Description of the new and updated avatar movement

Introduction

Update 023 introduces a brand new movement scheme. The approach assumes that “Spawn Avatar” packet is always sent to the client before any other packets described below can be sent. If the “Spawn Avatar” packet has not been sent, the client may query for a resend of the packet by sending the following command to the server:

```
rev <Base 220 encoded, 4 byte user id>
```

Spawn Avatar

'<' + user id + x + y + shape number + name + color code + flag + linefeed

| Name | Type | Size | Description |
|--------------|----------------|-------|--|
| Magic Key | CHAR | 1 | Always '<' (0x3c) |
| User ID | BASE220 INT | 4 | Unique User ID |
| X | BASE220 INT | 2 | Map position X |
| Y | BASE220 INT | 2 | Map position Y |
| Shape Number | BASE220 INT | 2 | Avatar shape number |
| Name | BASE220 STRING | 3-65 | Character name |
| Color Code | COLORCODE | 14-30 | Avatar color code |
| Flag | BASE220 INT | 1 | Zero, or any combination of the following flags: CHAR_FLAG_HAS_PROFILE = 1 CHAR_FLAG_SET_VISIBLE = 2 CHAR_FLAG_NEW_AVATAR = 4 |

To test whether the “spawn avatar” packet describes a newly arrived player, a Boolean AND operation should be performed with CHAR_FLAG_NEW_AVATAR and Flag. If the result is nonzero, the packet describes a newly arrived player.

Animated Move

'/' + user id + x + y + shape + linefeed

| Name | Type | Size | Description |
|--------------|-------------|------|----------------------------|
| Magic Key | CHAR | 1 | Always '/' (0x2f) |
| User ID | BASE220 INT | 4 | Unique User ID |
| X | BASE220 INT | 2 | Movement to map position X |
| Y | BASE220 INT | 2 | Movement to map position Y |
| Shape Number | BASE220 INT | 2 | Avatar target shape number |

Move Avatar

'A' + user id + x + y + shape + linefeed

| Name | Type | Size | Description |
|--------------|-------------|------|---------------------|
| Magic Key | CHAR | 1 | Always 'A' (0x41) |
| User ID | BASE220 INT | 4 | Unique User ID |
| X | BASE220 INT | 2 | New map position X |
| Y | BASE220 INT | 2 | New map position Y |
| Shape Number | BASE220 INT | 2 | Avatar shape number |

Update Color Code

'B' + user id + shape + color code + linefeed

| Name | Type | Size | Description |
|--------------|-------------|-------|---------------------|
| Magic Key | CHAR | 1 | Always 'B' (0x42) |
| User ID | BASE220 INT | 4 | Unique User ID |
| Shape Number | BASE220 INT | 2 | Avatar shape number |
| Color Code | COLORCODE | 14-30 | Avatar color code |

Hide Avatar

'C' + user id + x + y + linefeed

| Name | Type | Size | Description |
|-----------|-------------|------|--------------------|
| Magic Key | CHAR | 1 | Always 'C' (0x43) |
| User ID | BASE220 INT | 4 | Unique User ID |
| X | BASE220 INT | 2 | New map position X |
| Y | BASE220 INT | 2 | New map position Y |

Remove Avatar

'}' + user id + linefeed

| Name | Type | Size | Description |
|-----------|-------------|------|-------------------|
| Magic Key | CHAR | 1 | Always '}' (0x29) |
| User ID | BASE220 INT | 4 | Unique User ID |