A Whirled Tour

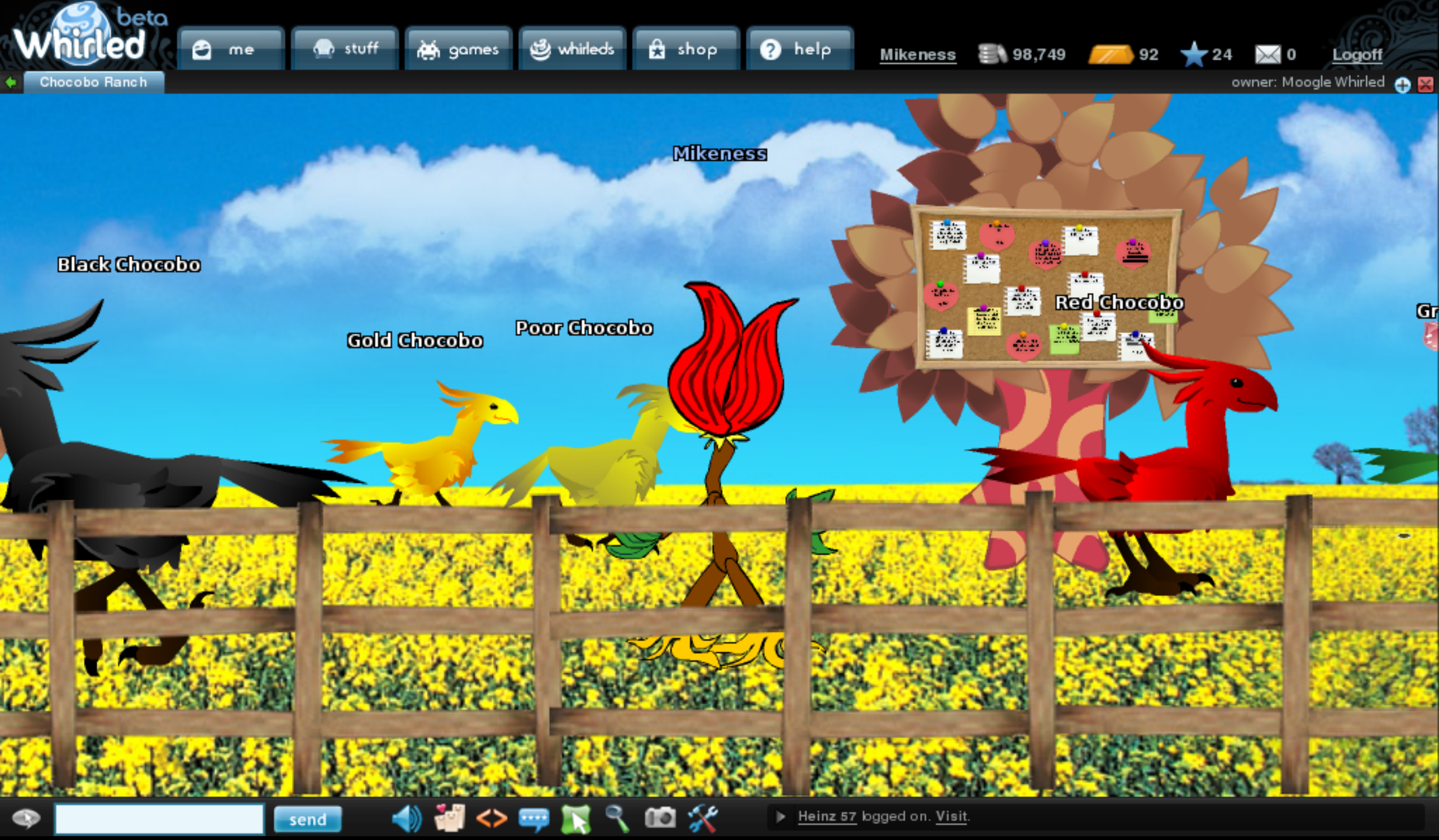
Michael Bayne, CTO Three Rings

Why in the Whirled?

What in the Whirled?

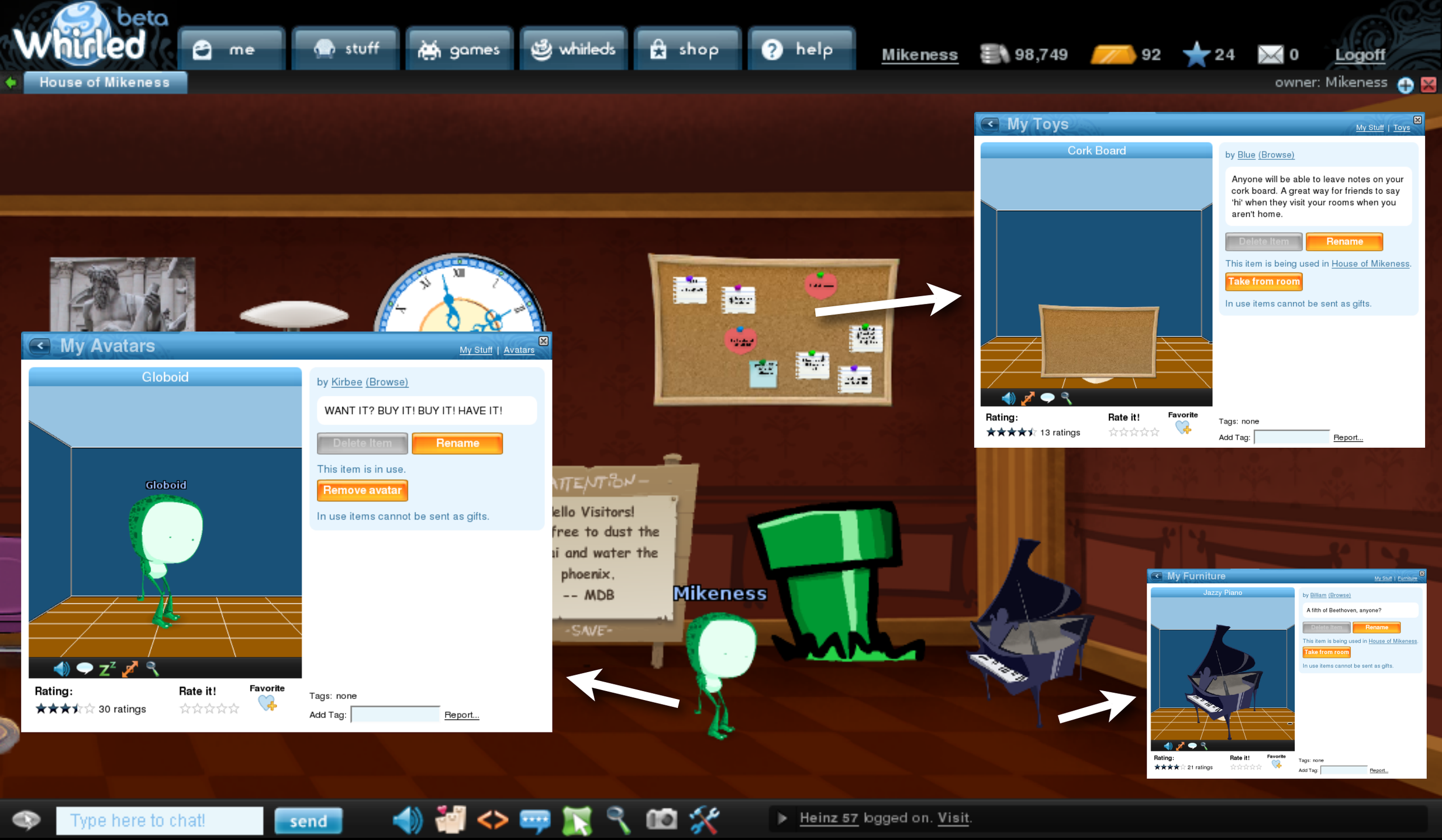
It’s a virtual world

made up of rooms

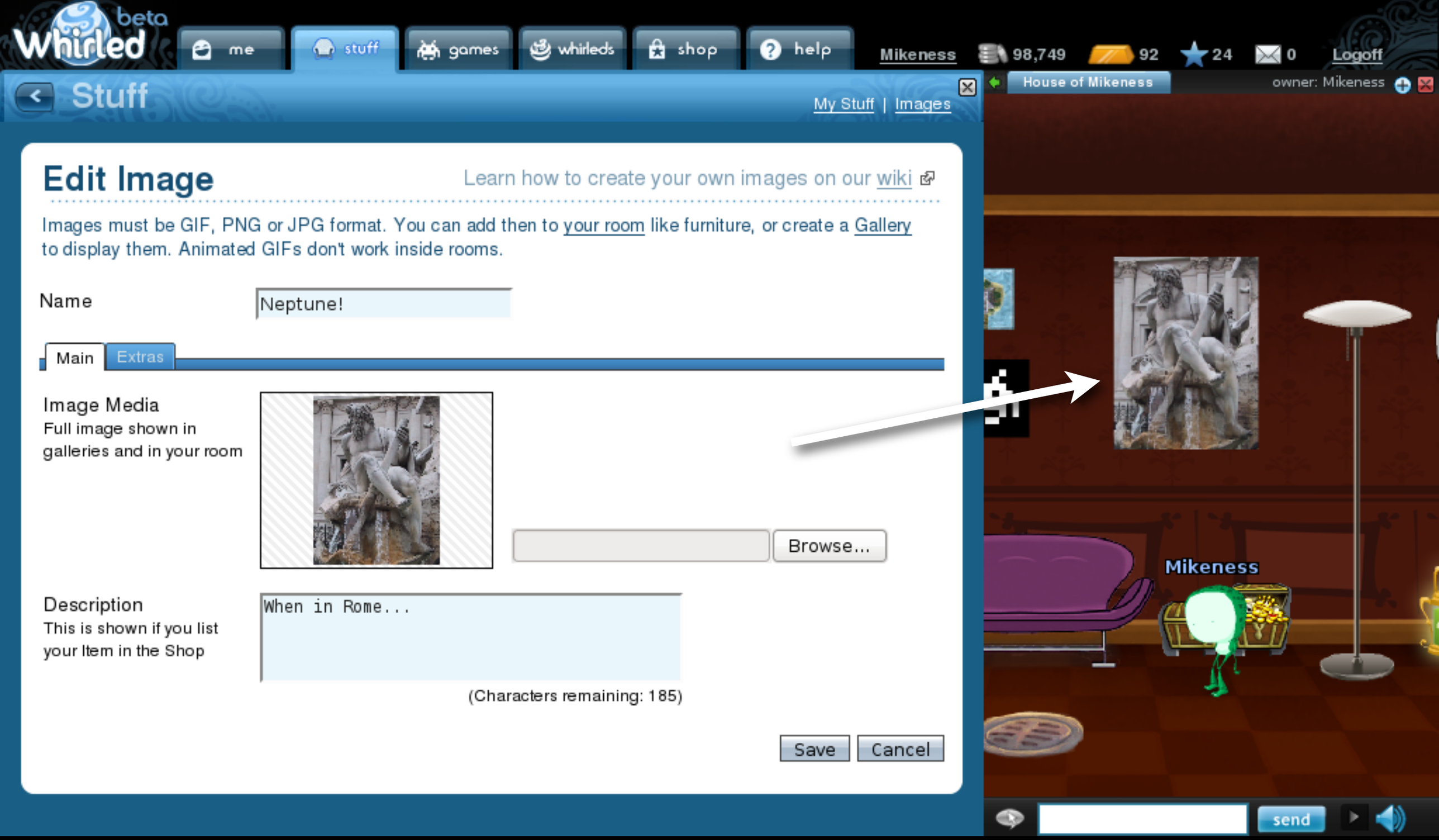


filled with stuff: furniture,
pets, toys, avatars.

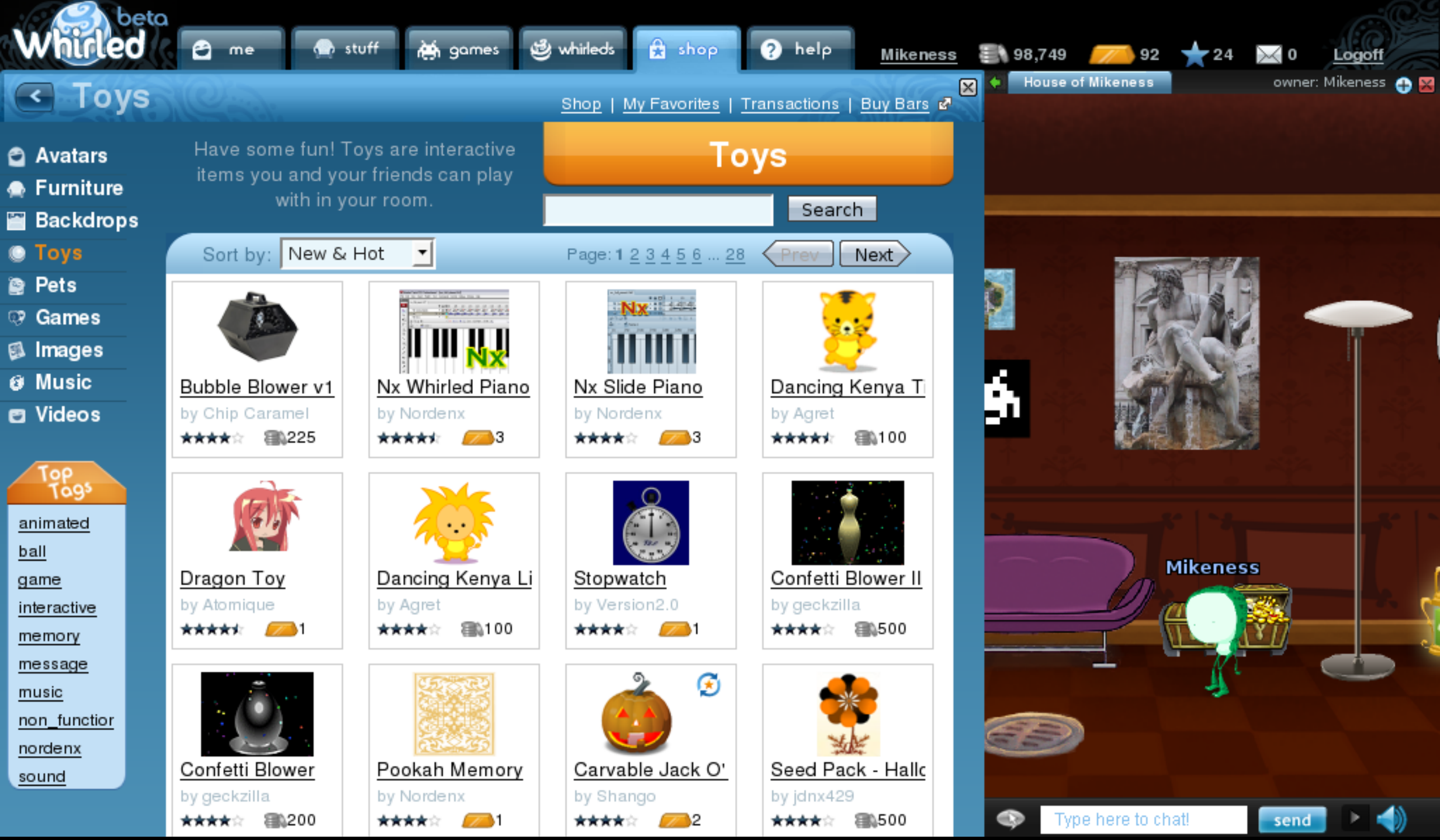
The rooms are arranged by the players with a built-in editor



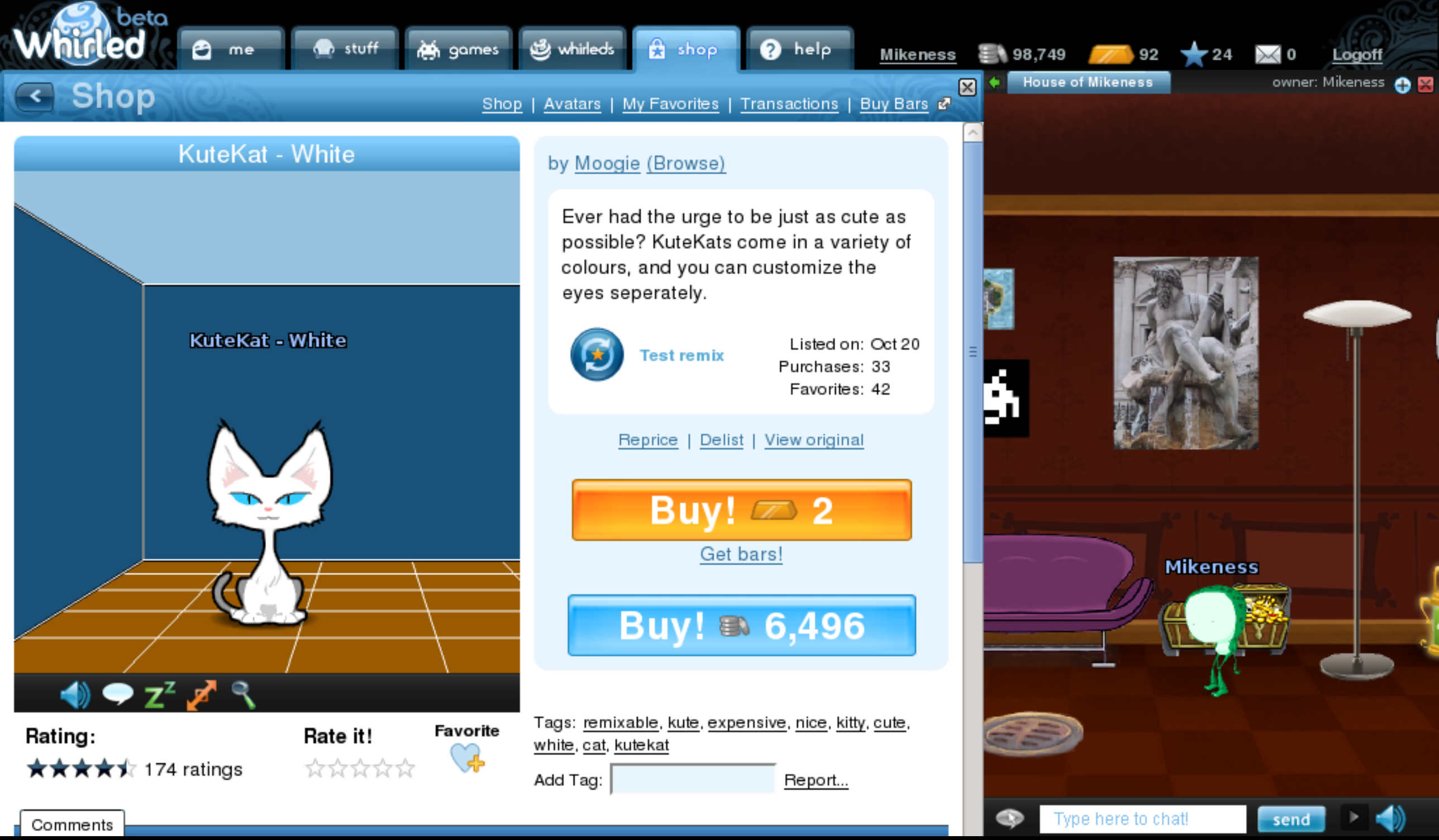
and everything in the room is created by players as well.



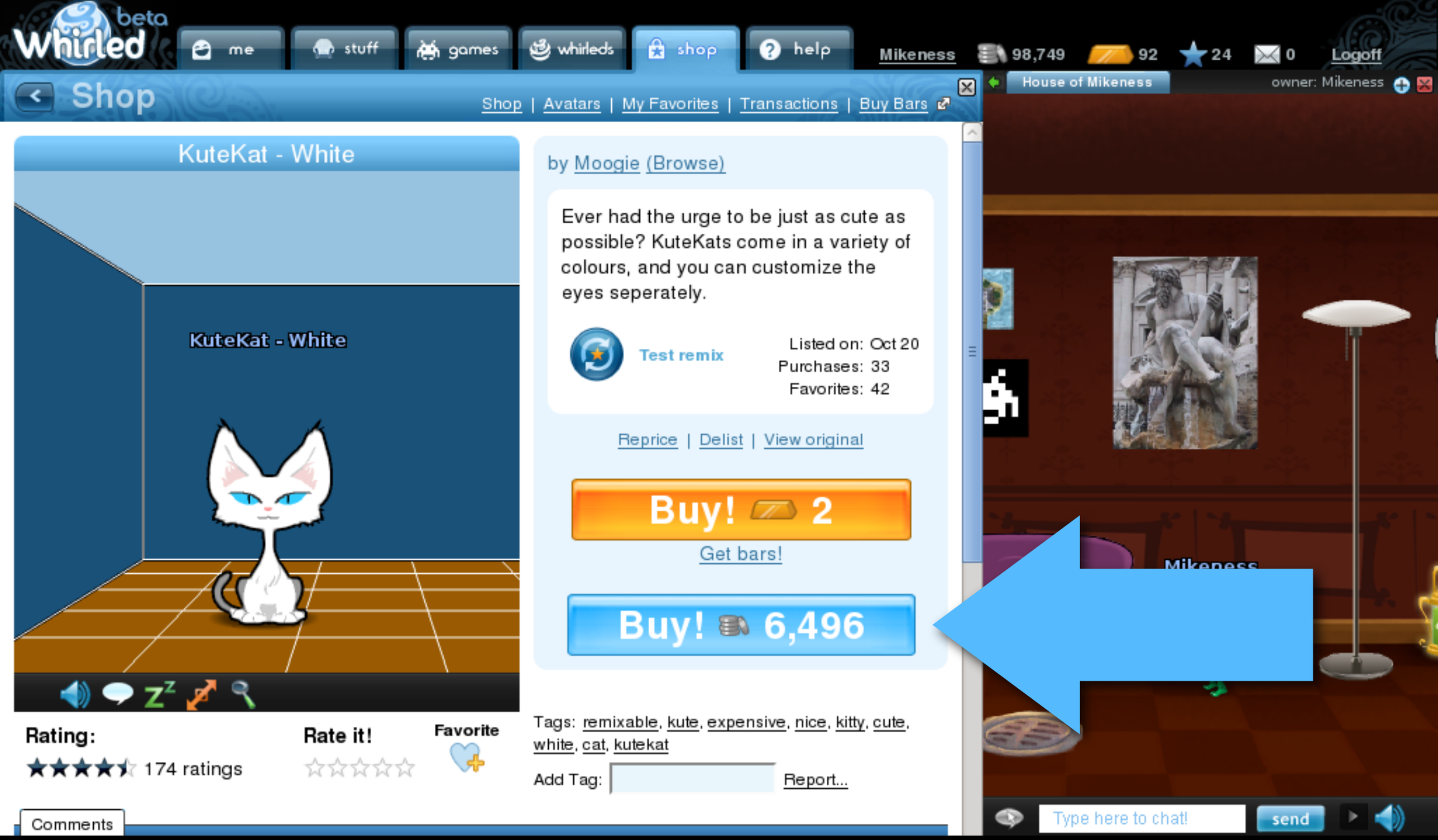
Players can upload items to use in their own rooms



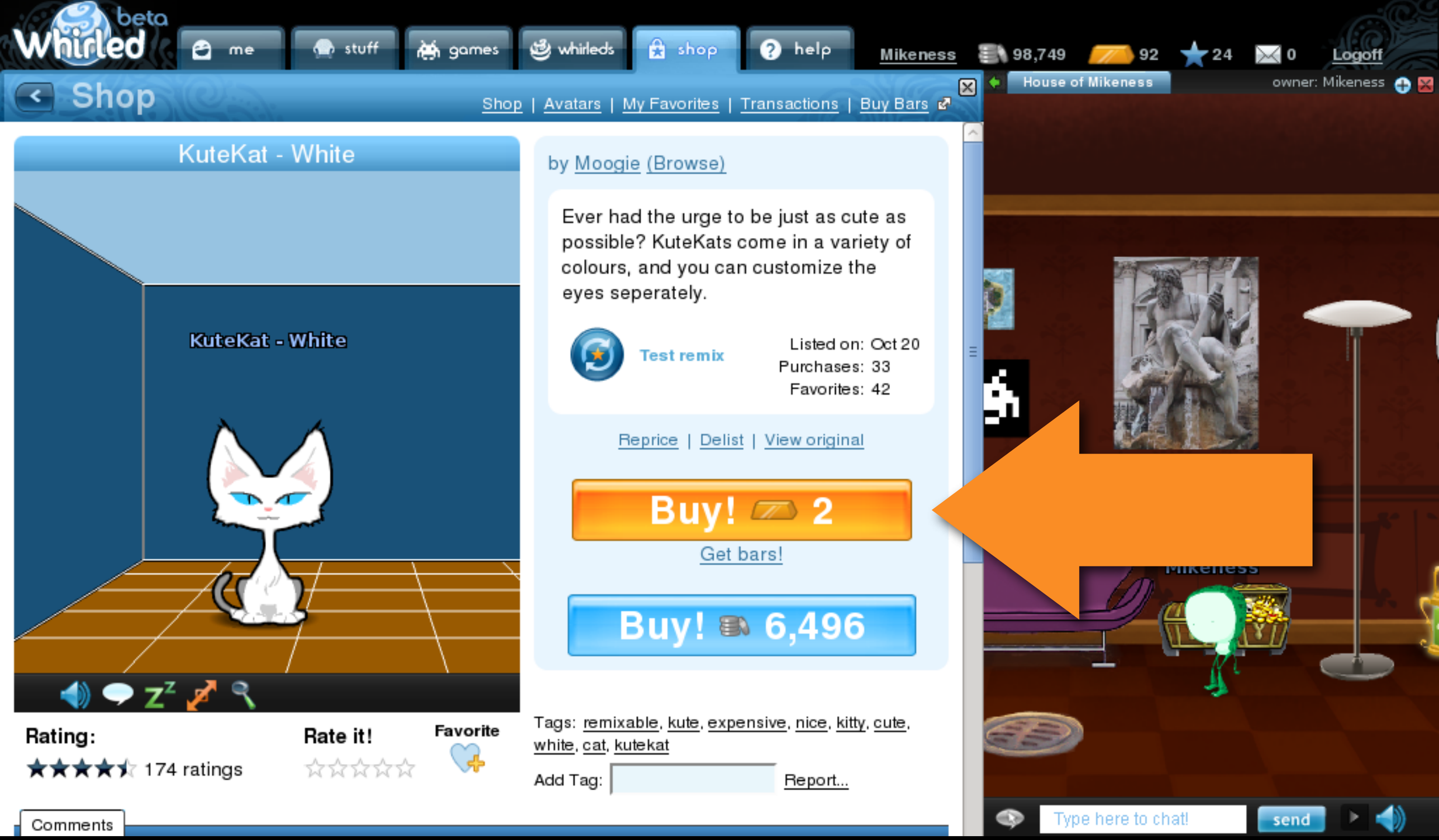
and they can sell them
in the catalog.



Items are sold for one of two currencies:



coins, earned by playing games and doing things on the site



and **bars**, purchased with real money.

Creators earn **bling**.

NattoMaki's Profile

Photos of Me

NattoMaki

Level: 36

knows karate and 17 other Japanese words

Male

California

Permaname: nattomaki

Member since: Mar 08, 2007

Last online: Today at 2:45pm

Send Mail | Visit Home | View Rooms | Browse Items

Information

Favorite Music:	Mose Allison, Charles Brown, Parliament, Tokyo Ska Paradise Orchestra, Kelly Joe Phelps, Southern Culture On The Skids, Ray Charles
Favorite Movies:	Glengarry Glen Ross, Tanpopo, Marusa no Onna, Godfather 1 & 2, Snatch, Kung Fu Hustle
Favorite Shows:	Trailer Park Boys, Deadwood, Rome, Sopranos
Favorite Books:	The Lorax

Friends

Beelzebub

Lone Star Lamour

JKasumi

butterfly

Captain Josh

Mikeness

See All 208 Friends

Passport Stamps

House of Mikeness — owner: Mikeness

Whirled is a community website:
with profiles

My Friends

Share Whirled with your **Friends!**

Invite Them!

Find Someone:

Search by real name, Whirled name, or email address

Search

Mikeness's Friends

Brittney

everybody watch the new landing page video!

Online now in Palace Arena. Join them!

Send mail | Visit home | Remove friend

Gyre O' Guile

poink?

Online now in Brave New Whirled. Join them!

Send mail | Visit home | Remove friend

NattoMaki

knows karate and 17 other Japanese words

Online now in Group Zyraxxus's room. Join them!

Send mail | Visit home | Remove friend

Zell

desires chicken sausage

Online now, playing Ghosthunters. Join them!

Send mail | Visit home | Remove friend

Vestibule

Send mail

House of Mikeness — owner: Mikeness

friends

Mail

Check Mail

Page: 1 2 Prev Next

JKasumi Today at 2:41pm	Be My Friend	Let's be buddies!
JKasumi Today at 2:33pm	Be My Friend	Let's be buddies!
Linkwhite Oct 20 at 8:47am	Dictionary Attack	Hey, I don't know if this is a known issue, but in multiplayer Dictionary Attack
Jes Sept 03 at 11:19am	OMG!	Heh thanks! I've got a few more patterns I'd like to do once I refine the proces
Silverwolf Aug 05 at 8:07am	help	Thanks for the information :)
Fox May 22 at 6:26am	Bang! Howdy Status.	Hello Mike, I'm sorry to bug you like this, but I'm hoping you still have a str
The Cosmic Cheese Jan 10 at 9:04pm	Creator Survey	[Background--Coming into whirled I've had sporadic programming experience, and v
Shelly Jan 08 at 8:12pm	Creator Survey	This is good because I have lots of input on this subject :D 1. Decor, Furnitur
Gobanzo Mon Jan 08 at 12:13pm	Creator Survey	1. Modified the template avatar's appearance and released it. Make an avatar fro

House of Mikeness — owner: Mikeness

mail

Whirled Builders

Whirled Builders

Est. Mar 04, 2007 by sadiekate

301 Members

Enter Whirled | Discussions

Join this Whirled

Shop!

Read Charter

6 online now!

Building THE Whirled for You

Charter

Do you like to make furniture? Avatars? Games? Anything at all?

Go ahead and join!

The member's directory and gallery is now in place! To change your display room, send a note to sadiekate. (It's the cheapest Harvard dorm room you'll ever find.)

Creative challenges are posted in the discussions once a month, so be sure to post if you've completed a challenge!

<< Back to Discussions

Members

Manager
sadiekate

Conrad500

ĐΛЯк

Tikikala

Juiceten

groups

Discussions

Whirled Builders Discussions: **Resource Room Installation**

<search>

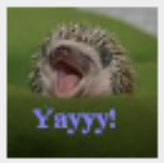
sadiekate on Apr 14 at 11:54am

Many of you have likely seen the so-called "resource room" just to the right of the Whirled Builders's Hall. It has been woefully empty for a very long time. This is about to change.

I am looking for links that have been helpful to you while creating things for Whirled. These could be links to useful forum threads, whirled wiki pages, flash tutorials from anywhere on the internet, examples, drawing tutorials, coding help, reference photos, and on and on. Anything that's helped you at all while making Whirled content.

Please post your link below and a brief description of how it was helpful to you. Once I've put the decor and furniture in place, I'll start setting up links in-whirled.

<<QUOTE REPLY



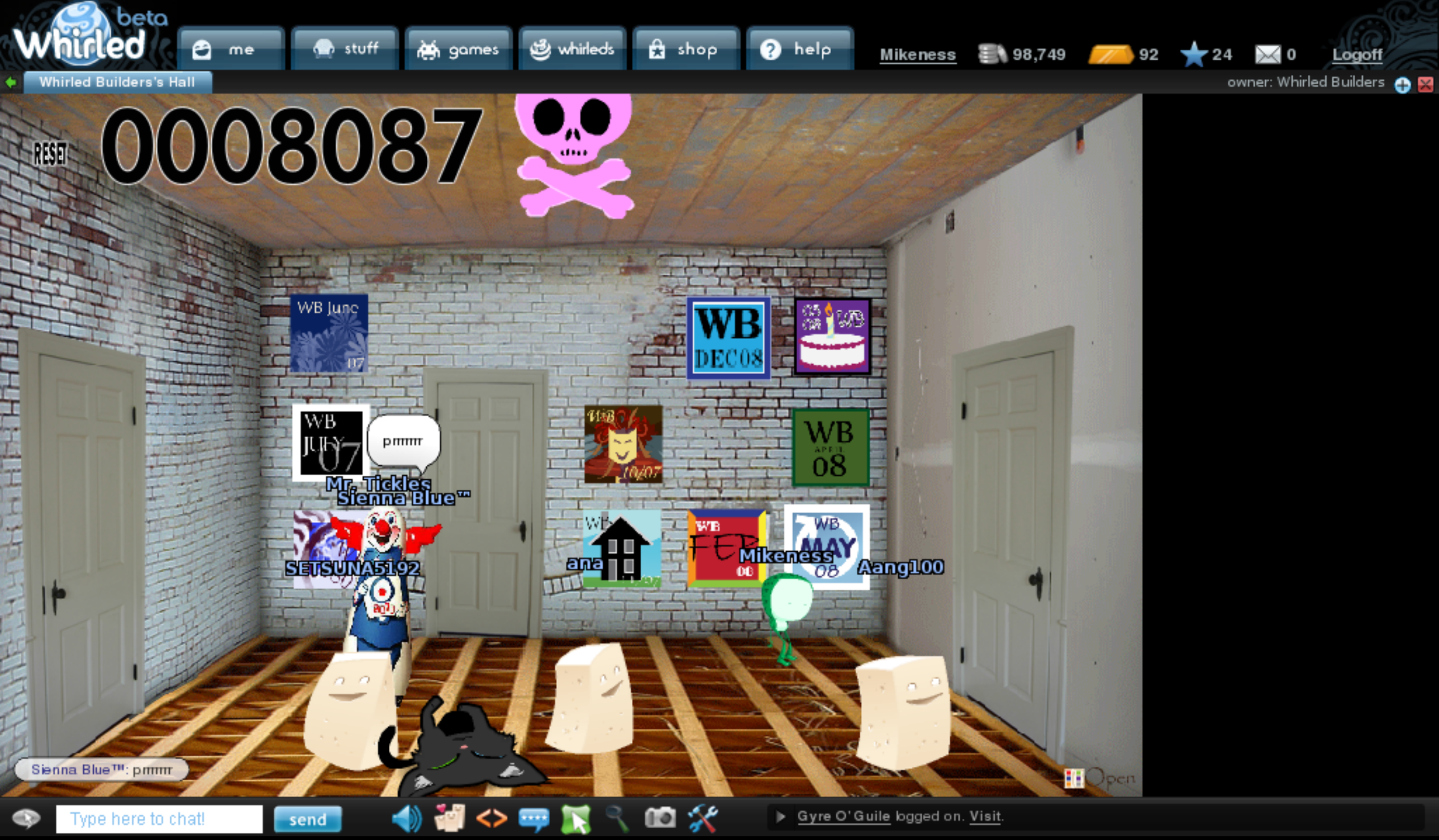
Whirligig on Apr 15 at 9:27pm

I've found some good sounds at The Freesound Project. Their clips are licensed under the Creative Commons Sampling Plus 1.0 license, which basically requires author attribution.

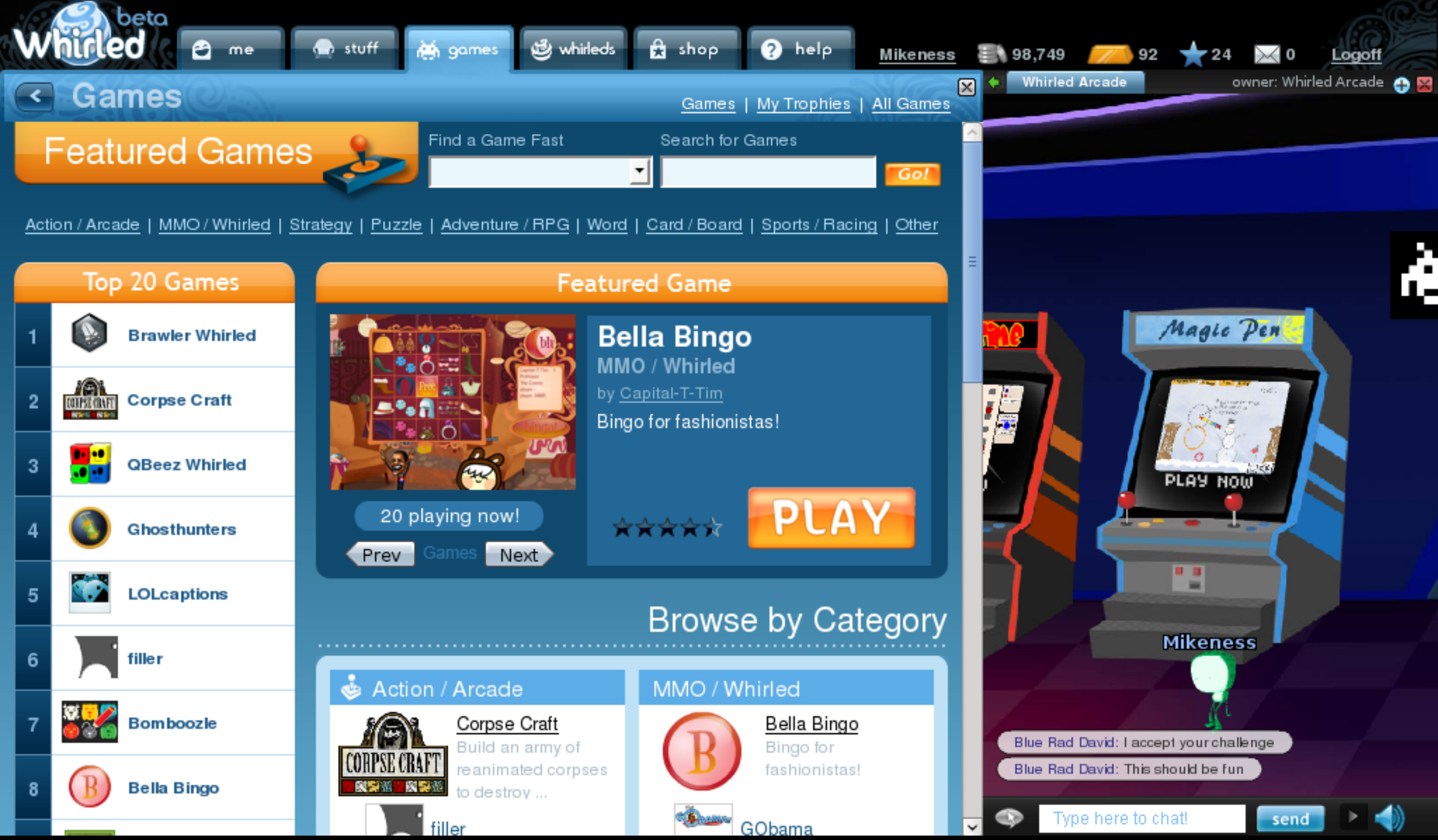
<<QUOTE REPLY

boozoo on May 02 at 3:28pm

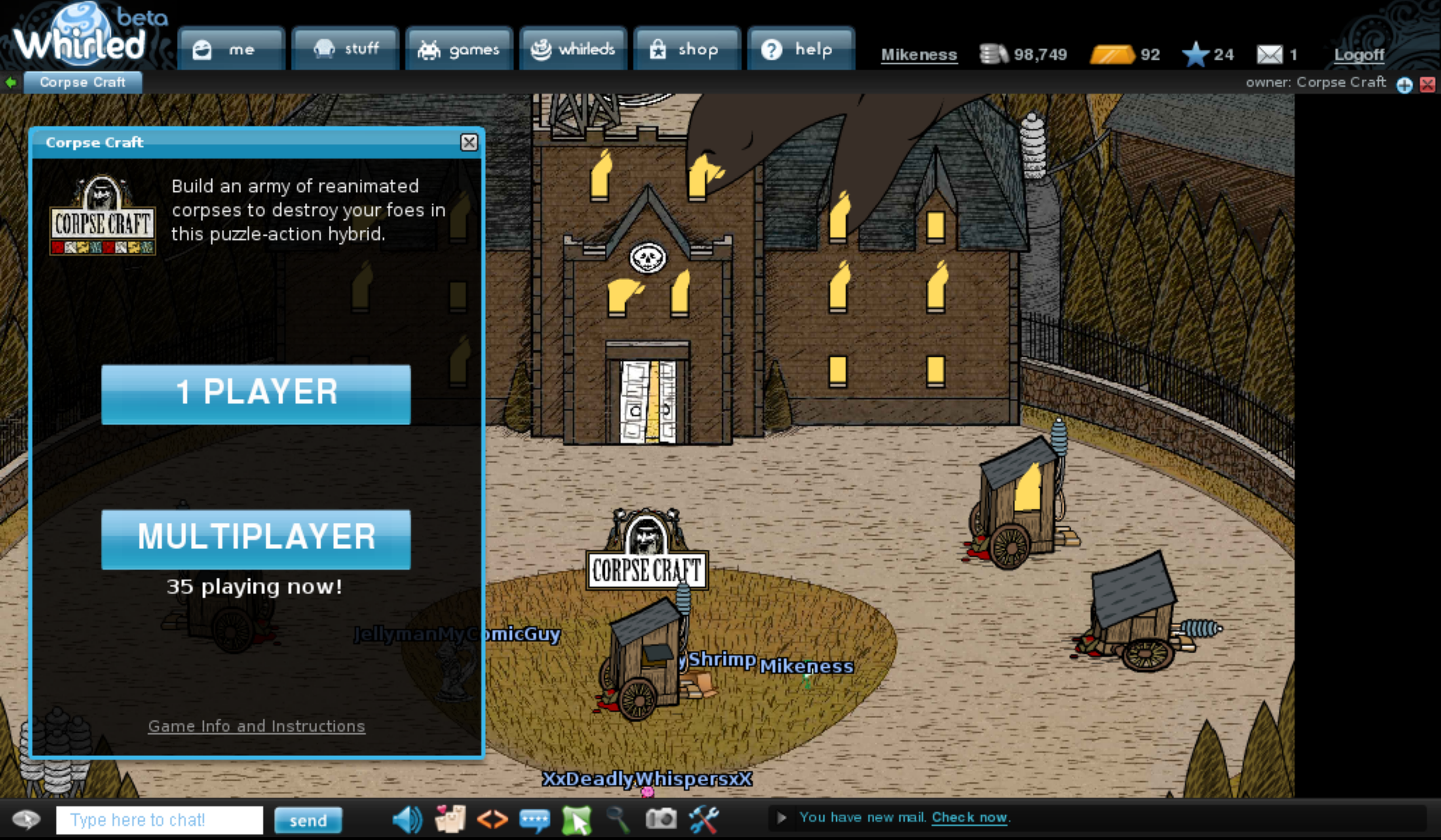
forums



and clubhouses
(shared virtual spaces).

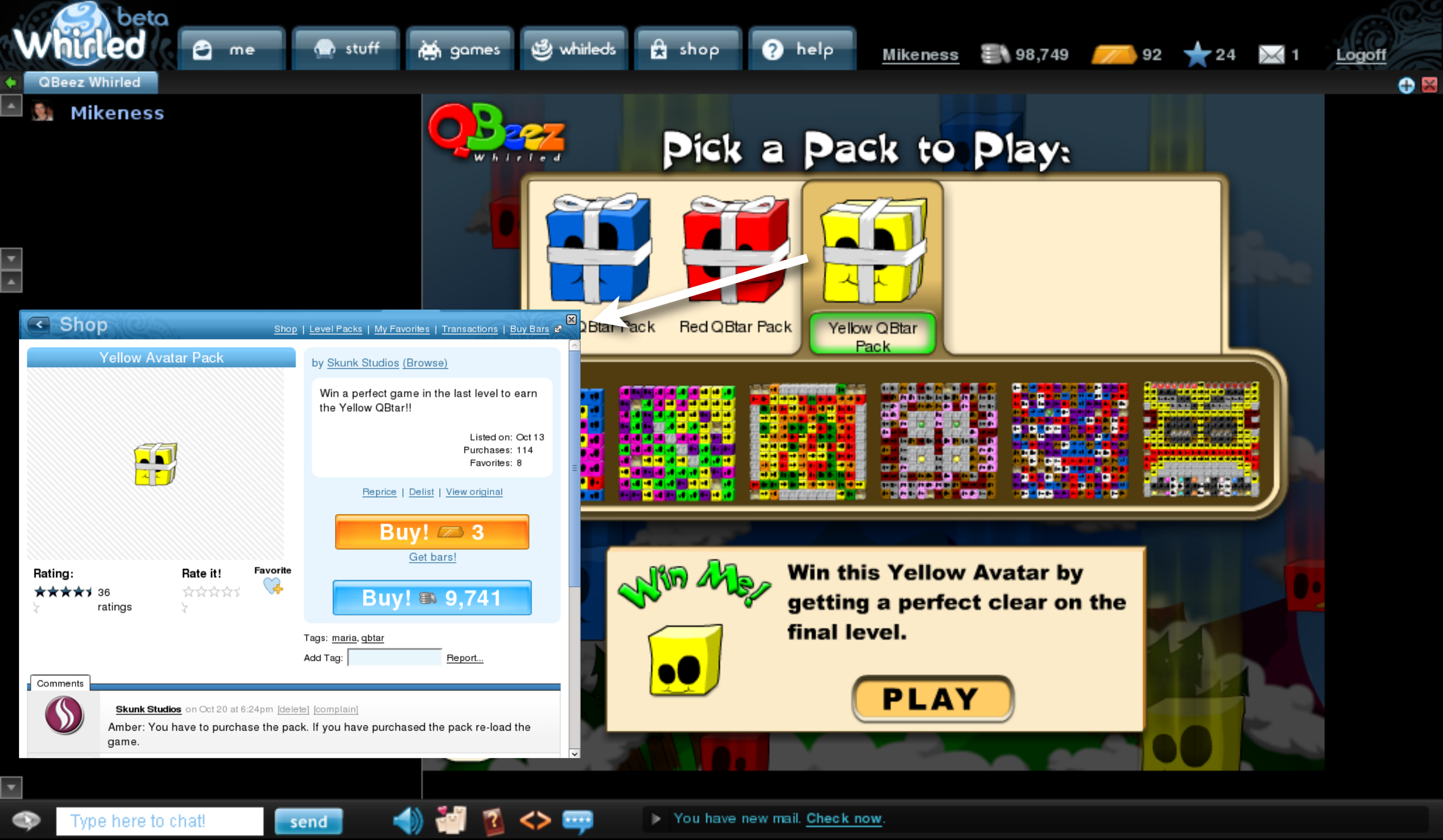


Whirled is a casual games website.

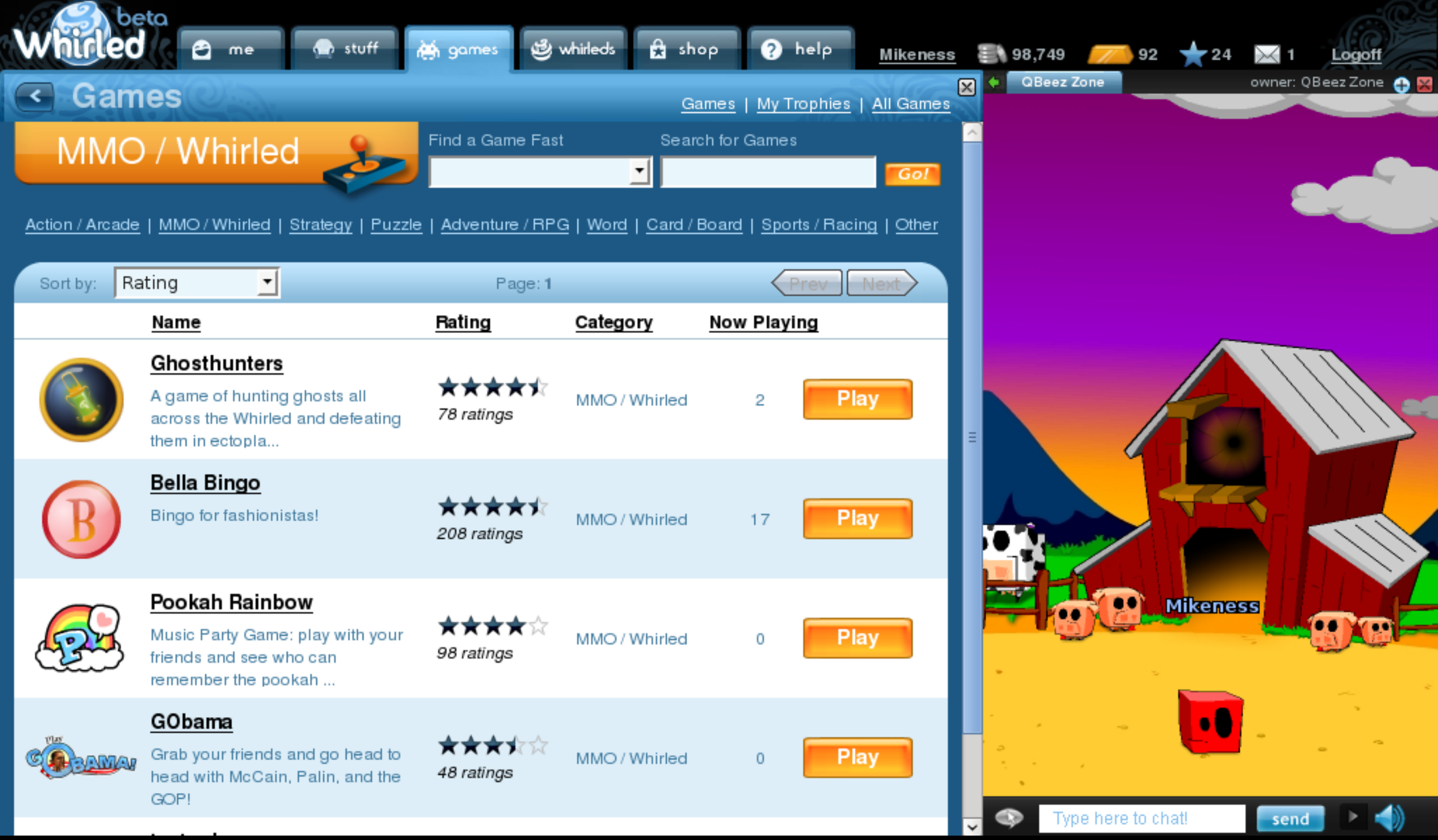


Developers can make single- or multiplayer games

and award trophies



and sell level and item packs.



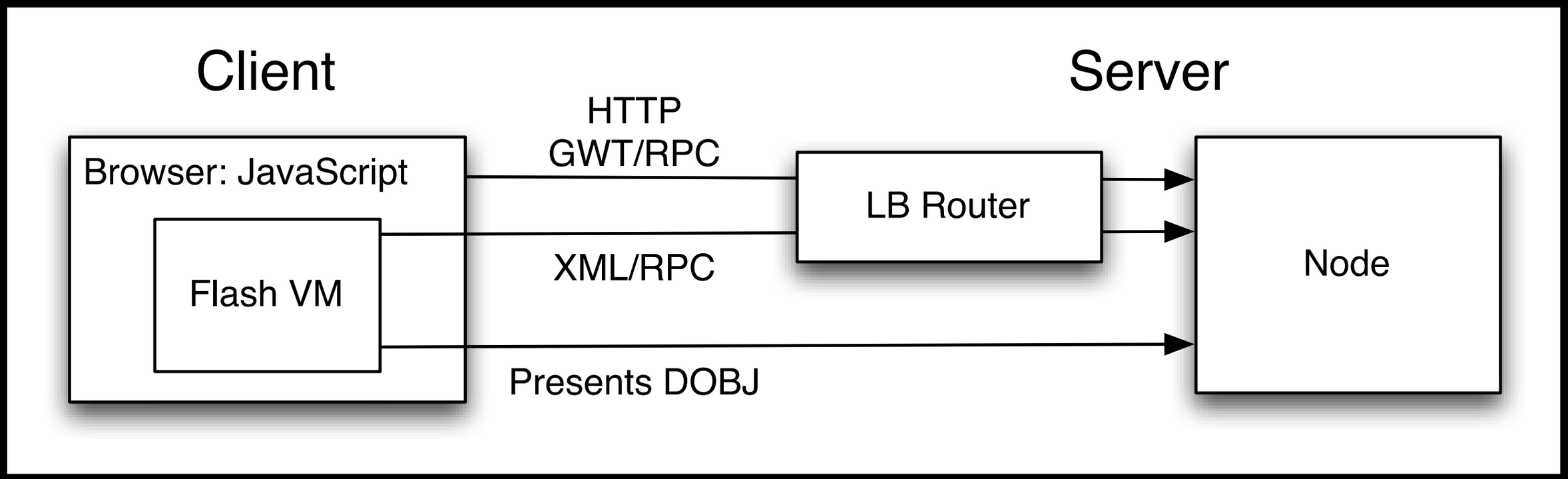
Whirled is a collection of mini-MMOs.

Mini-MMOs are like overlays on the virtual world.

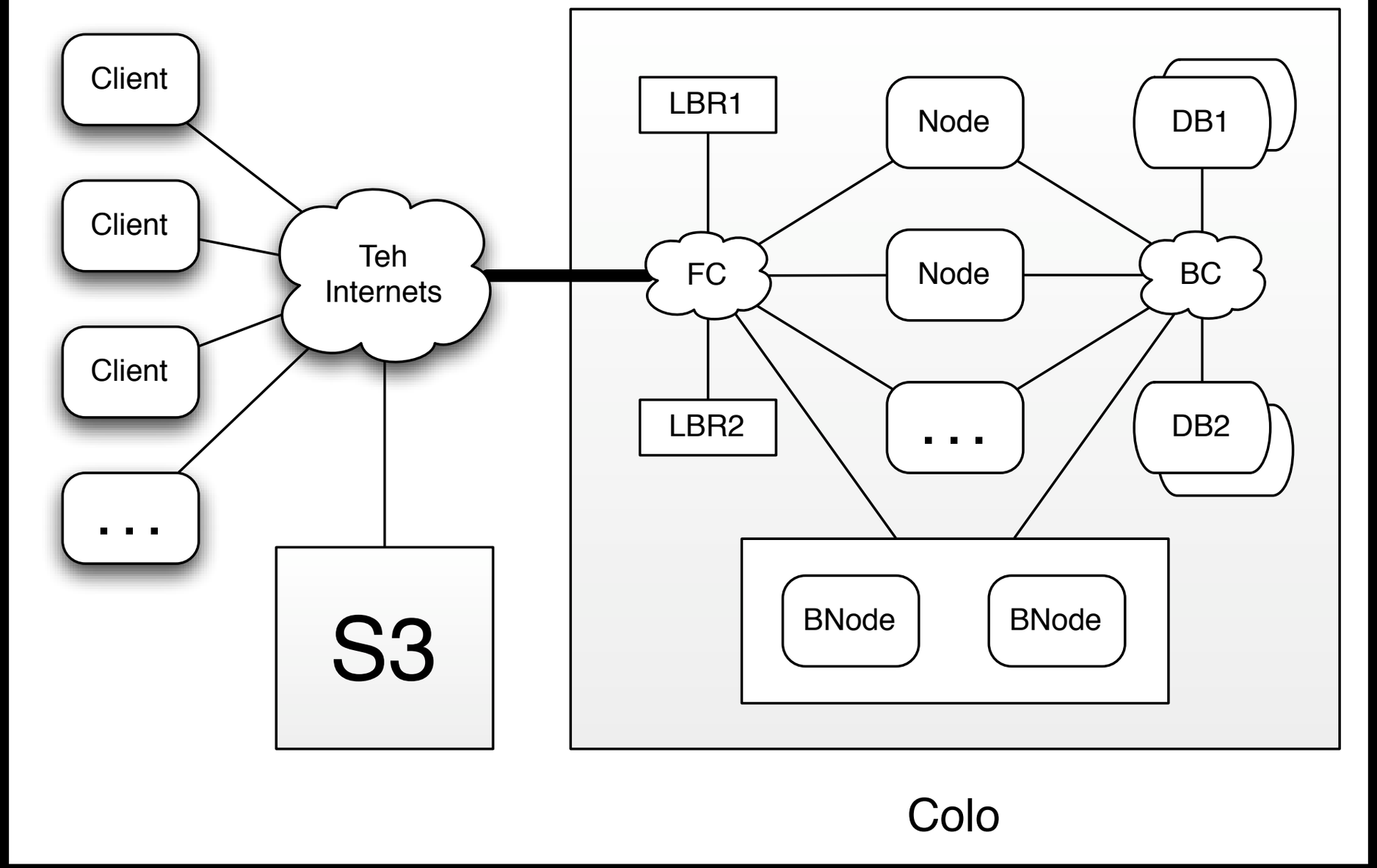
They make use of the Whirled room and avatar systems.

How in the Whirled?

Whirled client is Flash + GWT

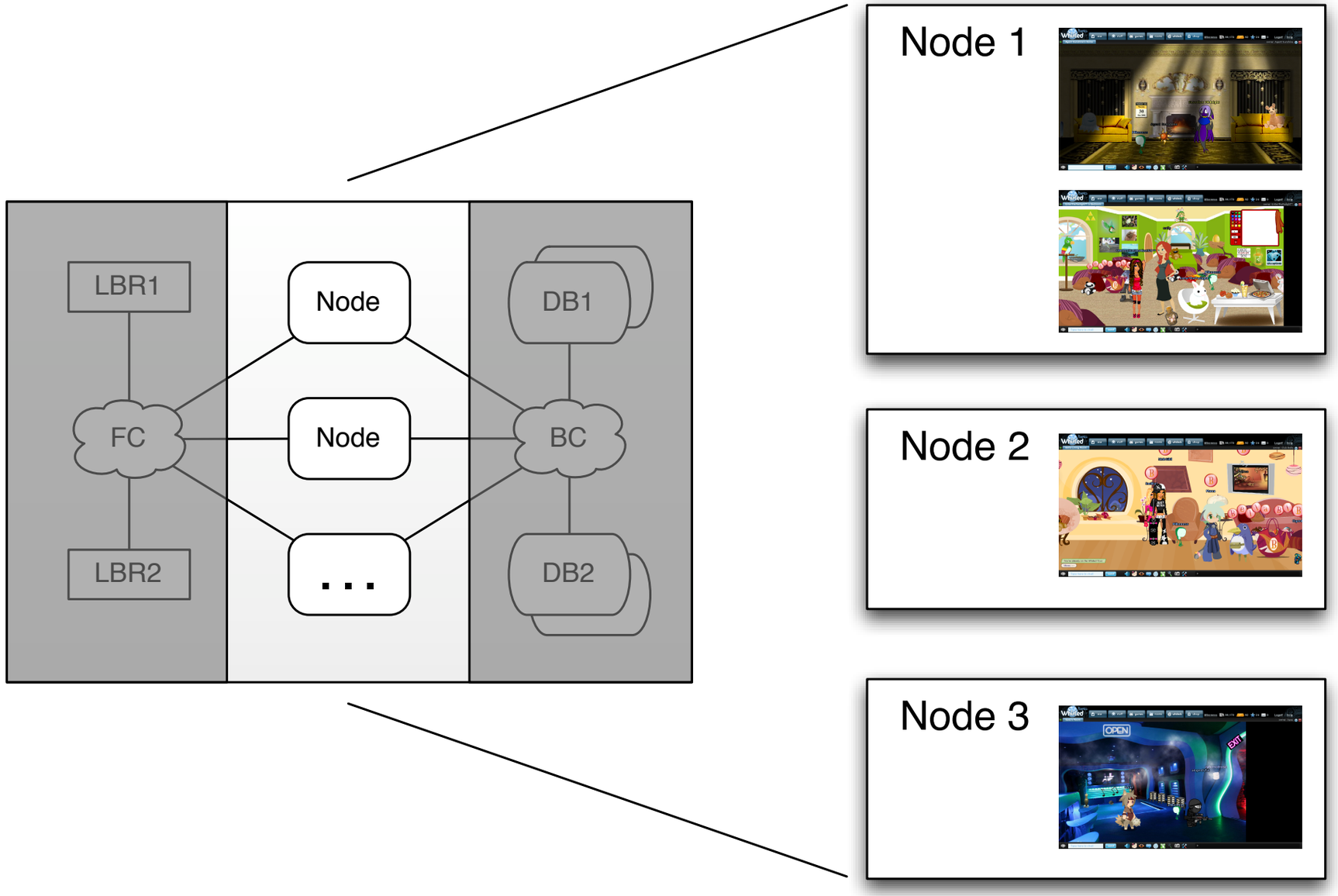


Whirled uses a few protocols.

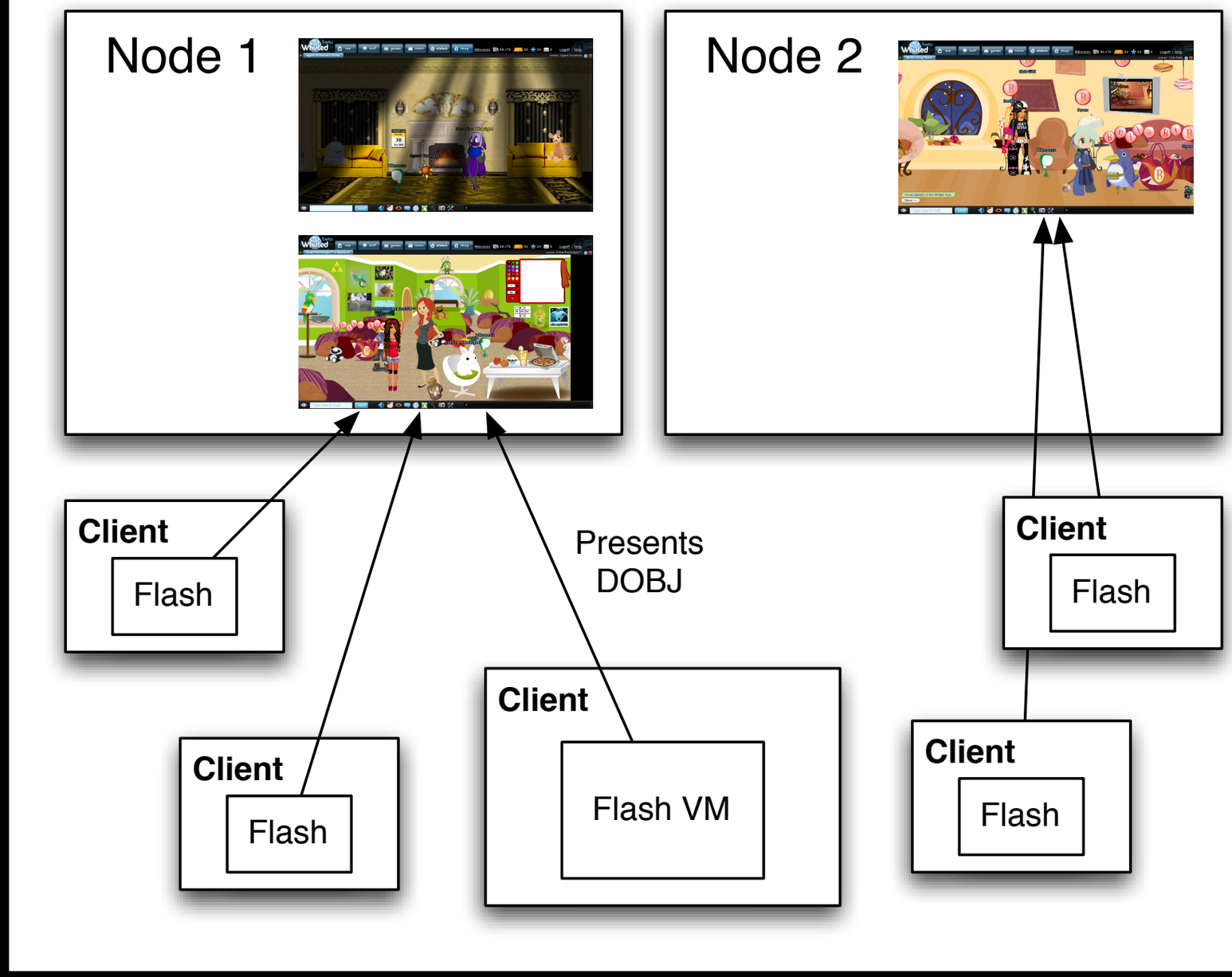


Whirled can has network diagram.

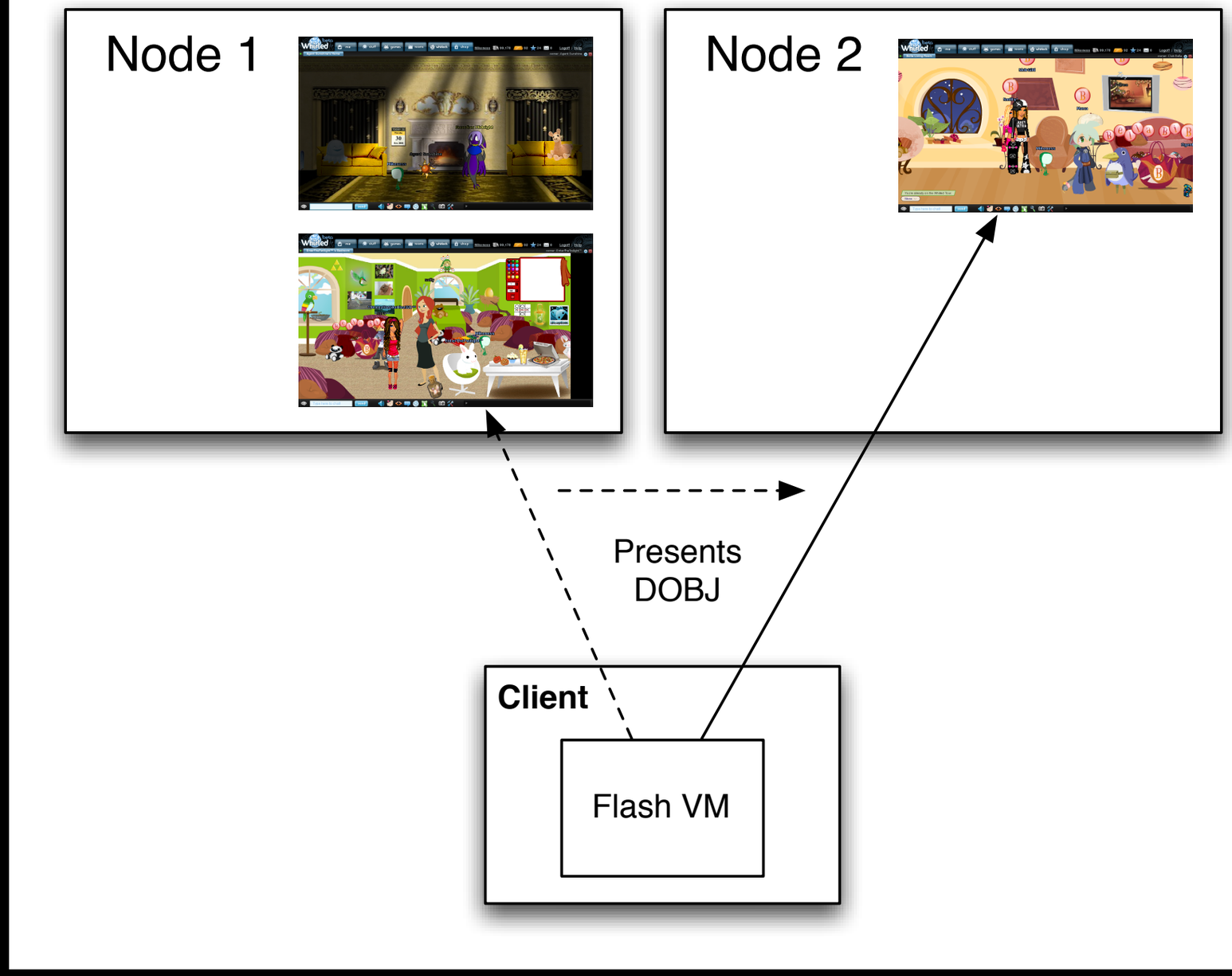
Whirled is Rooms.



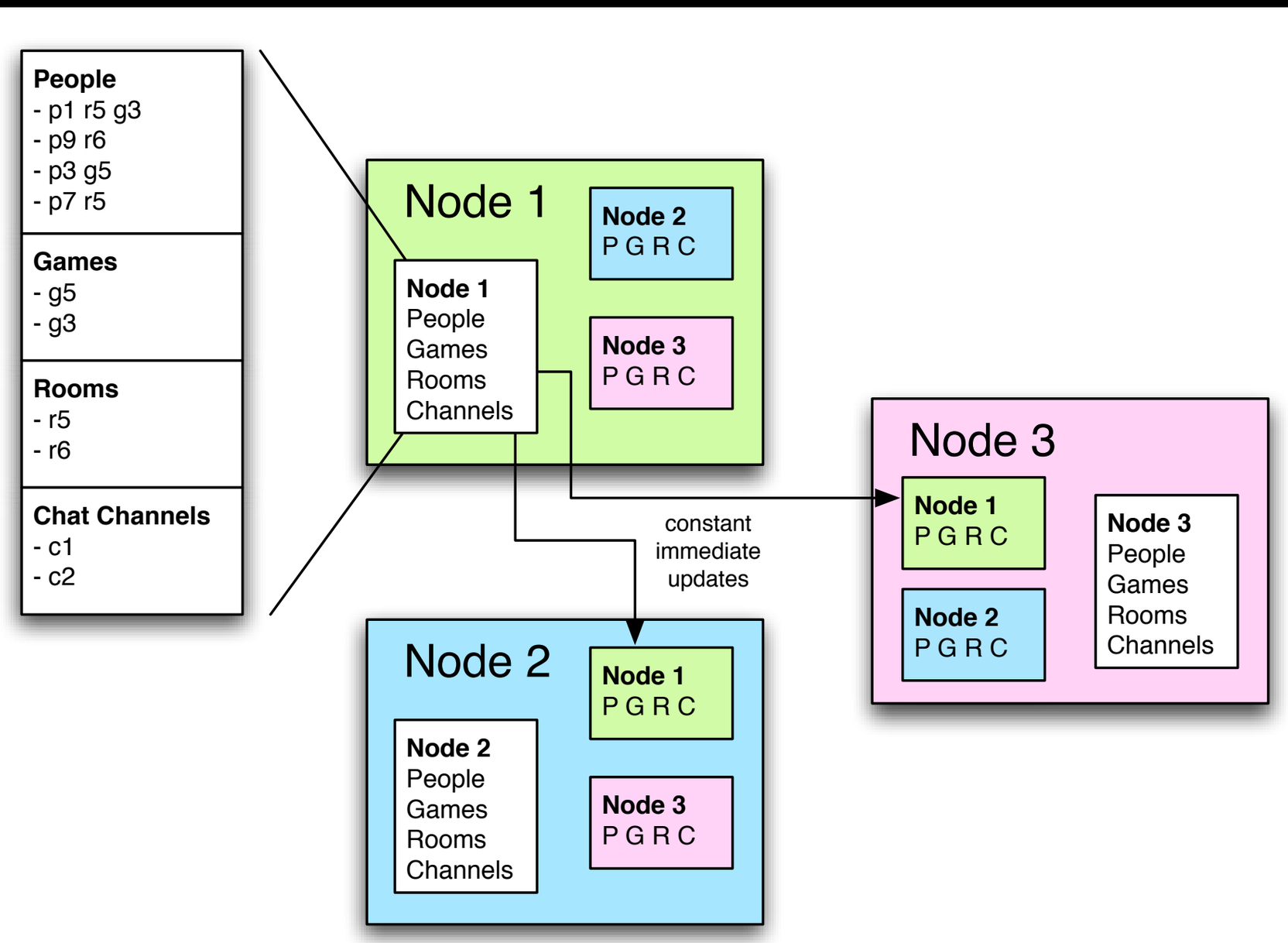
Rooms are on Nodes.



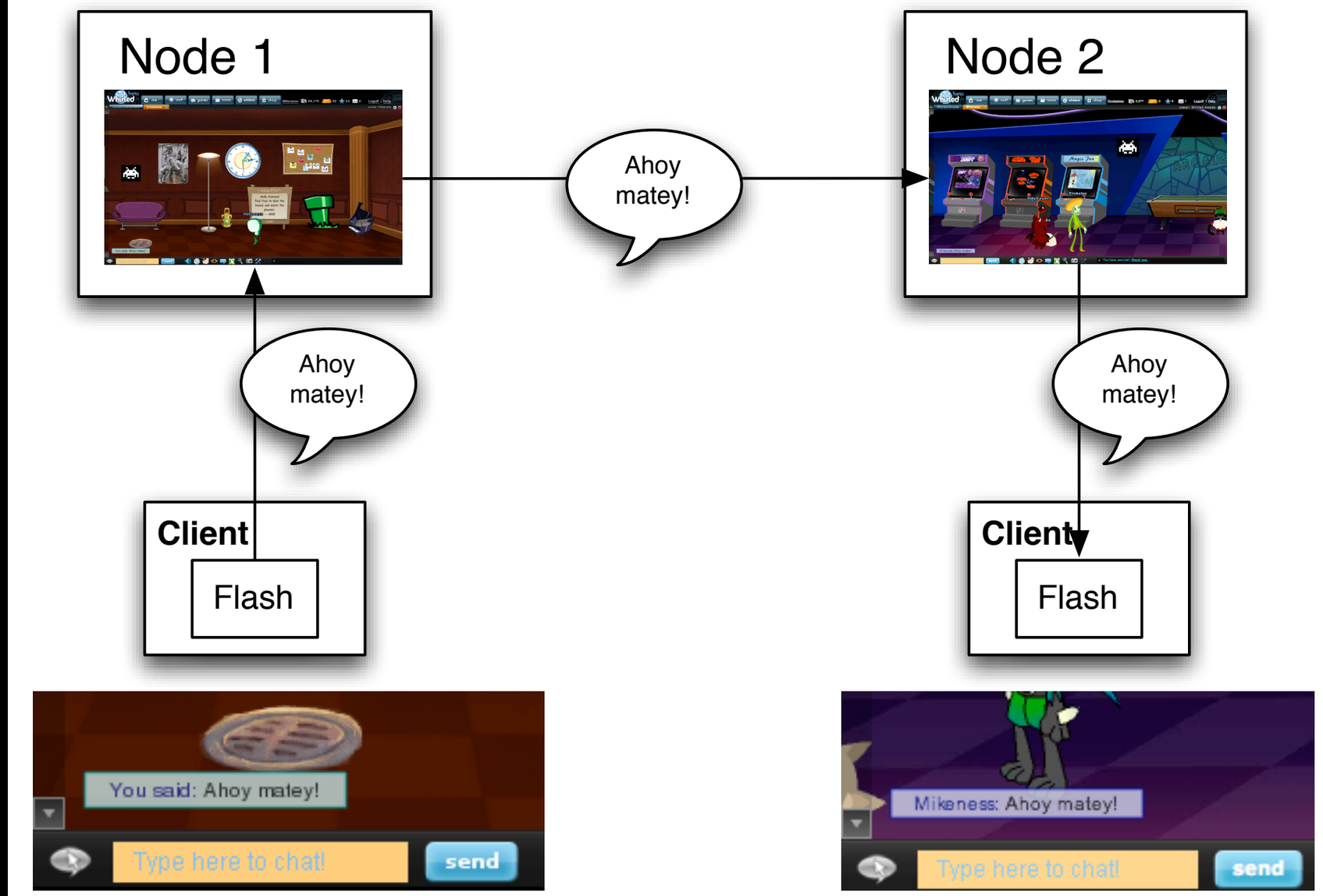
Clients talk to a Room's Node.
Network traffic is local to the Node.



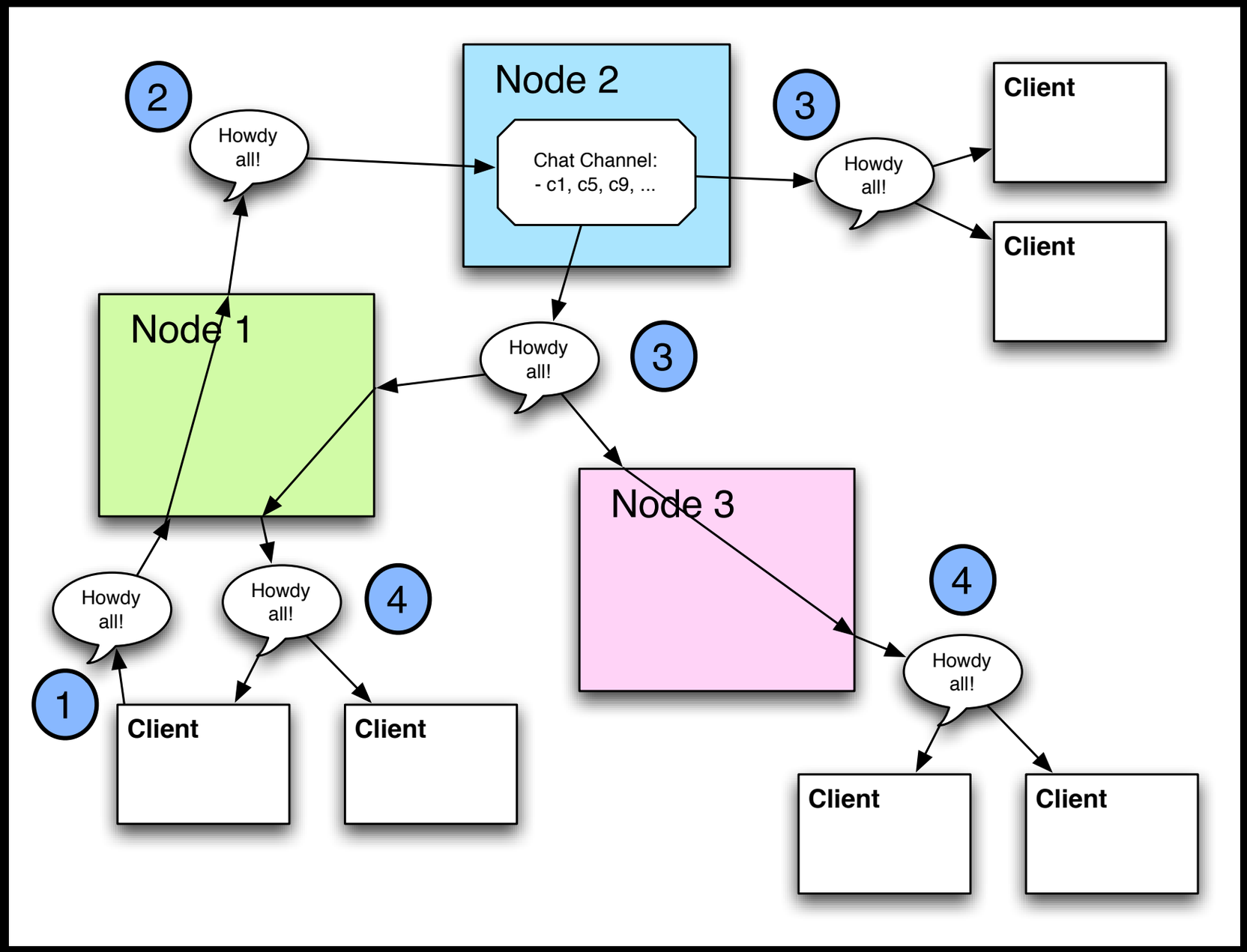
As clients move around the Whirled they switch between nodes.



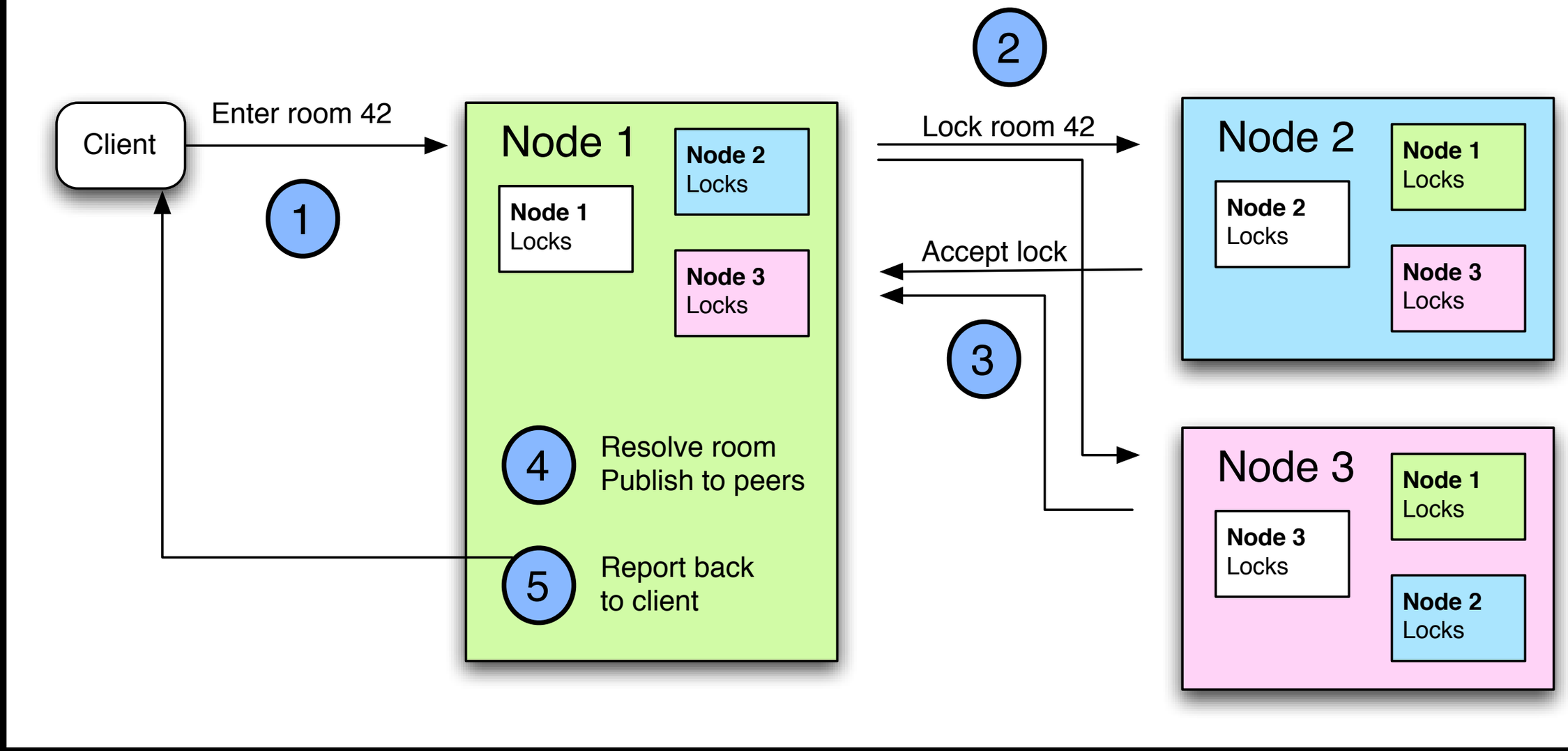
Nodes publish information visible to all nodes.



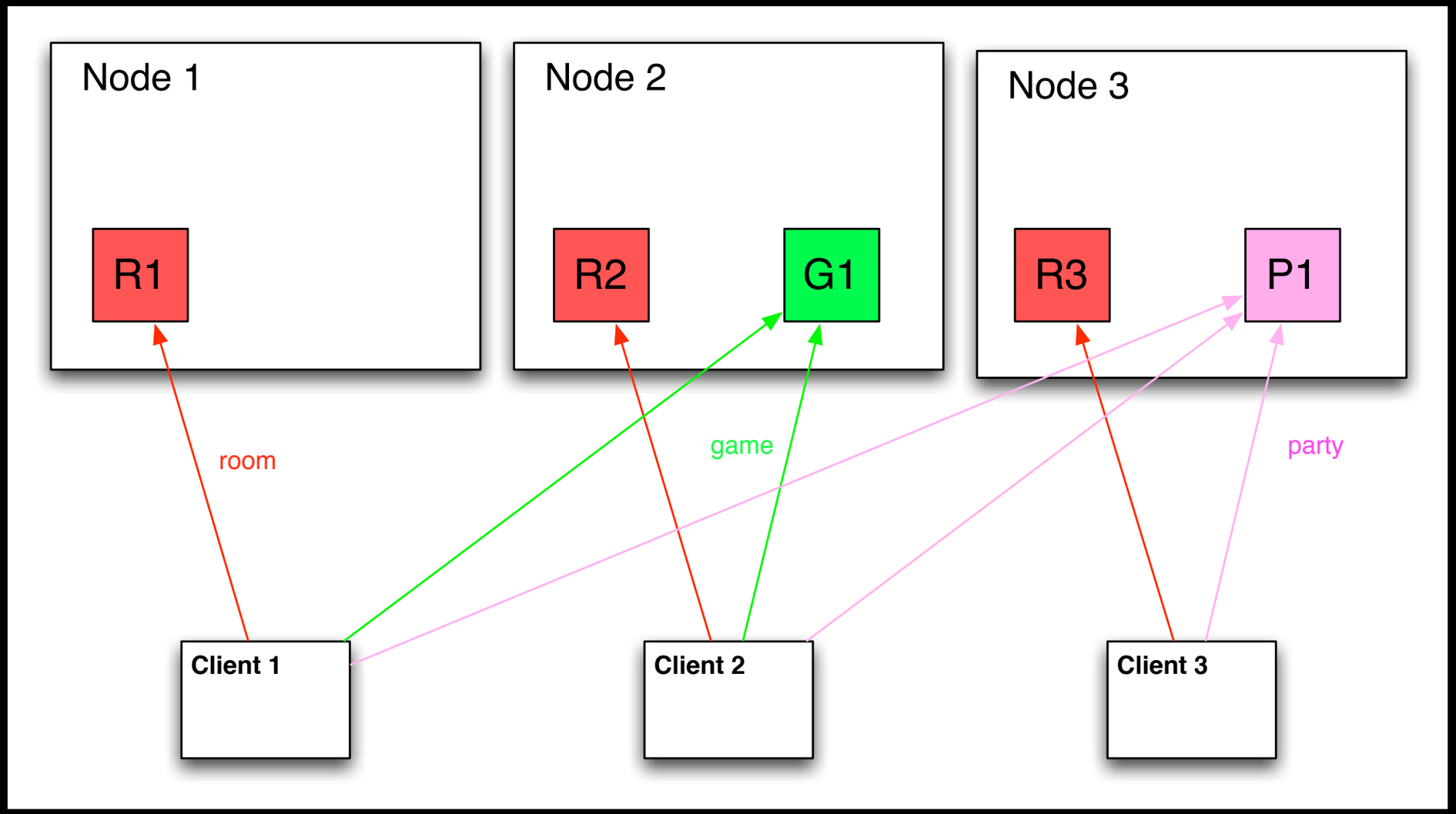
Some things span nodes,
like person to person chat.



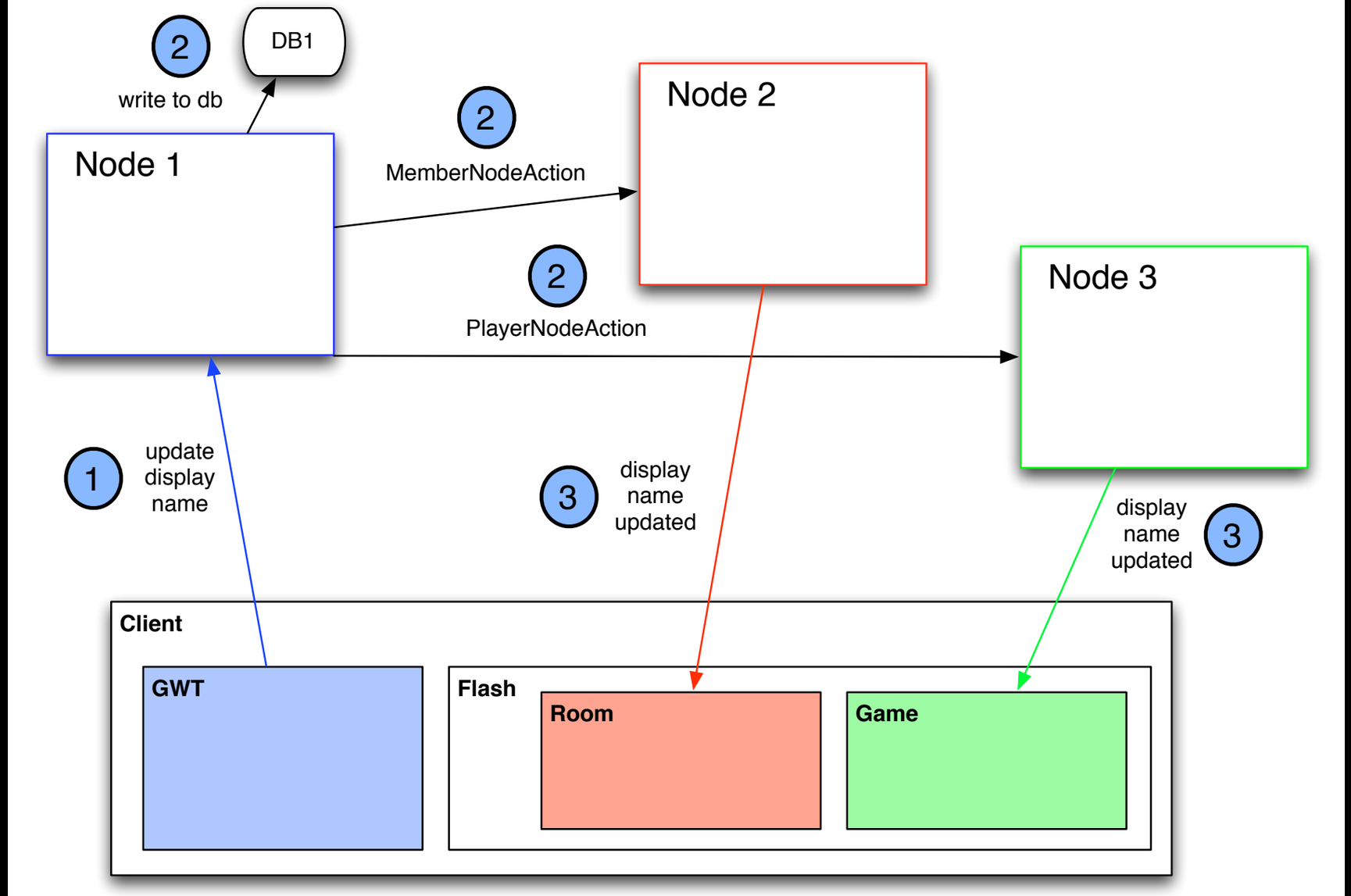
Group chat is more complicated...



Nodes coordinate with a distributed locking protocol.



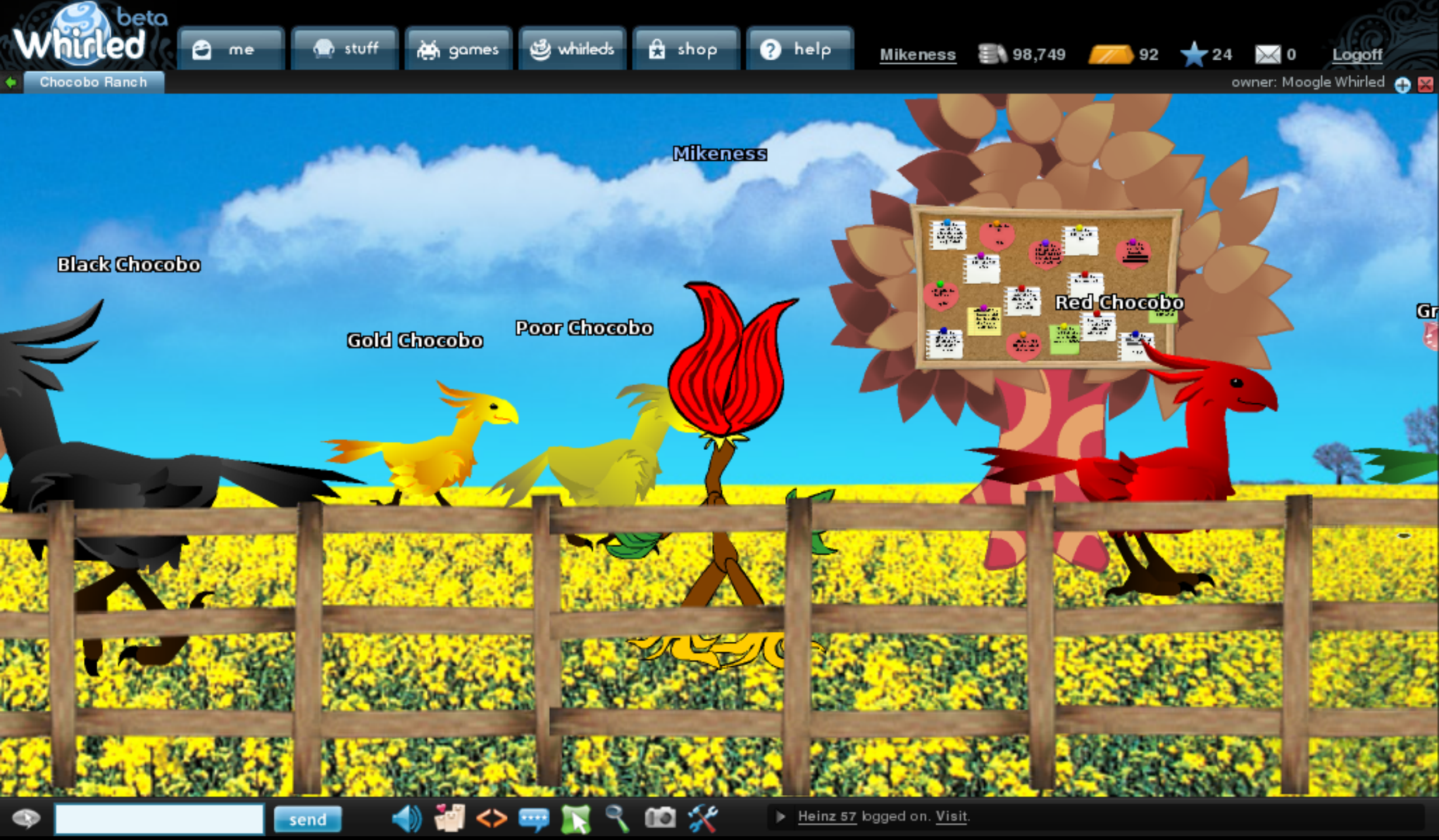
Clients may maintain multiple distributed object connections.



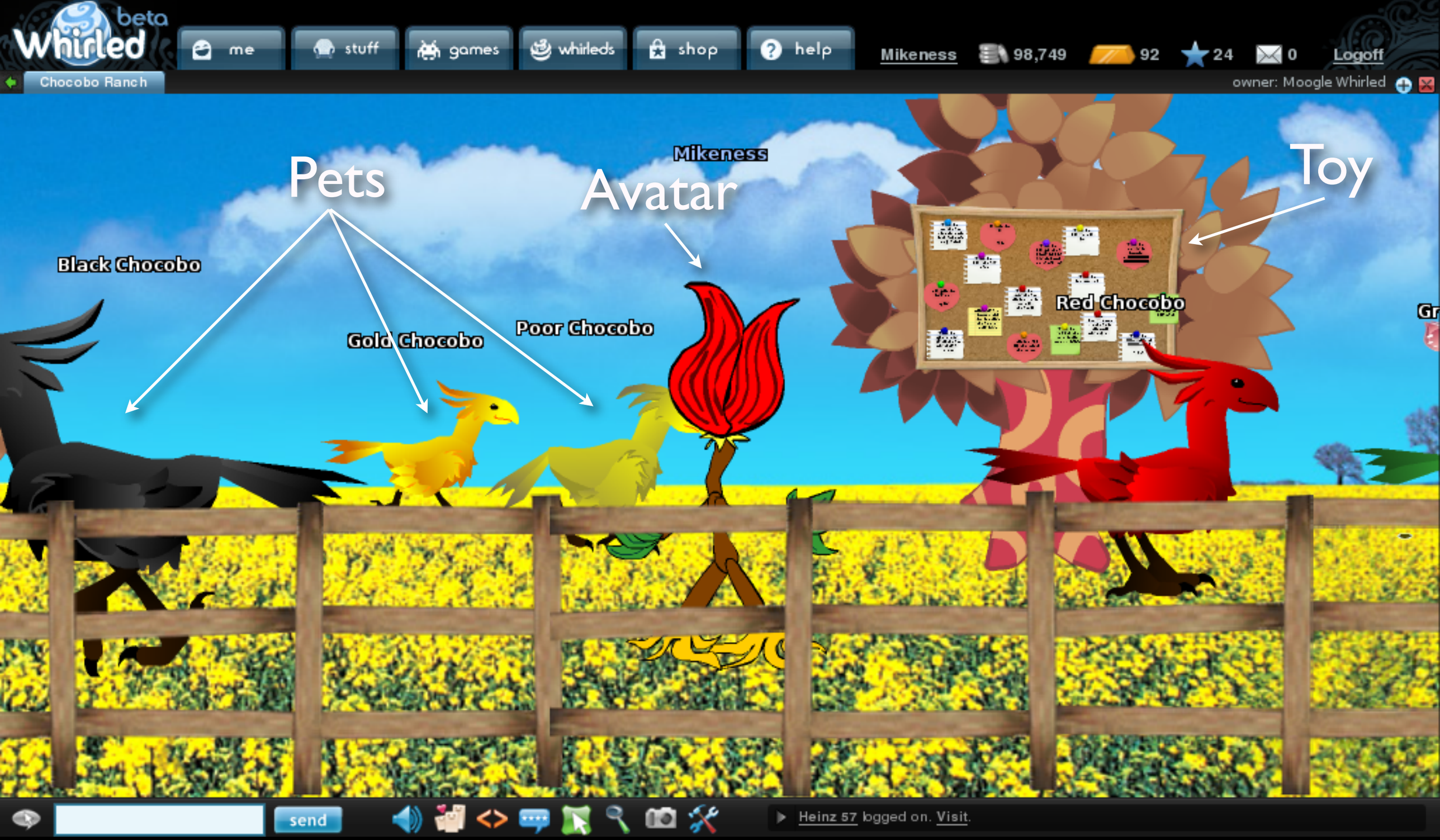
Things can happen in
many places in the network.

```actionscript
/** Handles informing a game server that a player's display name has changed. */
protected static class DisplayNameUpdated extends PlayerNodeAction
{
    public DisplayNameUpdated (MemberName name) {
        super(name.getMemberId());
        _name = name.toString();
    }

    public DisplayNameUpdated () {
    }

    protected void execute (PlayerObject plobj) {
        // update their player object
        plobj.setMemberName(
            new VizMemberName(_name, plobj.getMemberId(), plobj.getHeadShotMedia()));
        // update their name in their occupied "place" (game) if any
        _bodyMan.updateOccupantInfo(
            plobj, new OccupantInfo.NameUpdater(plobj.getVisibleName()));
    }

    protected String _name;
    @Inject protected transient BodyManager _bodyMan;
}
```

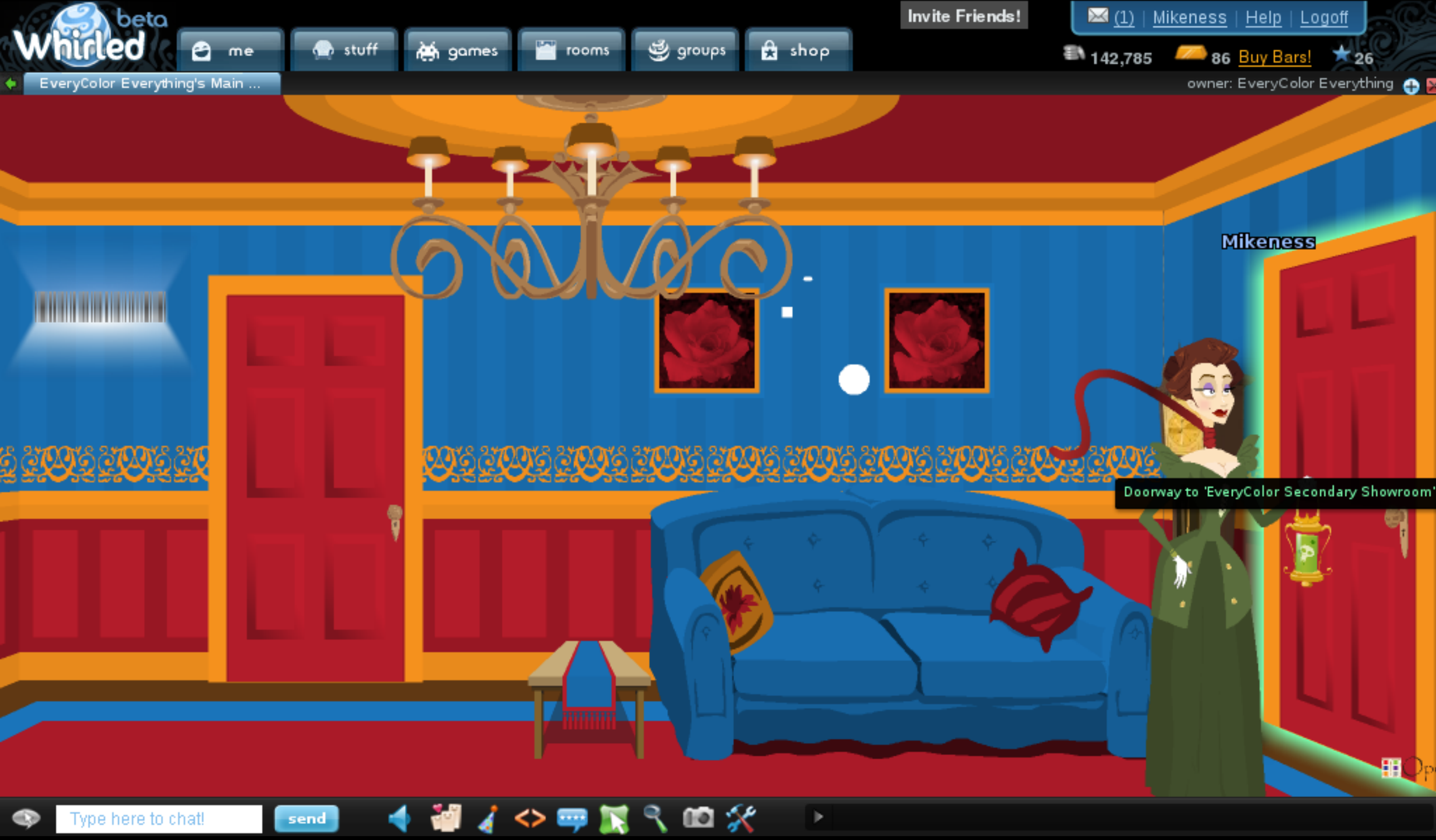
NodeAction makes it simple to do things from anywhere.



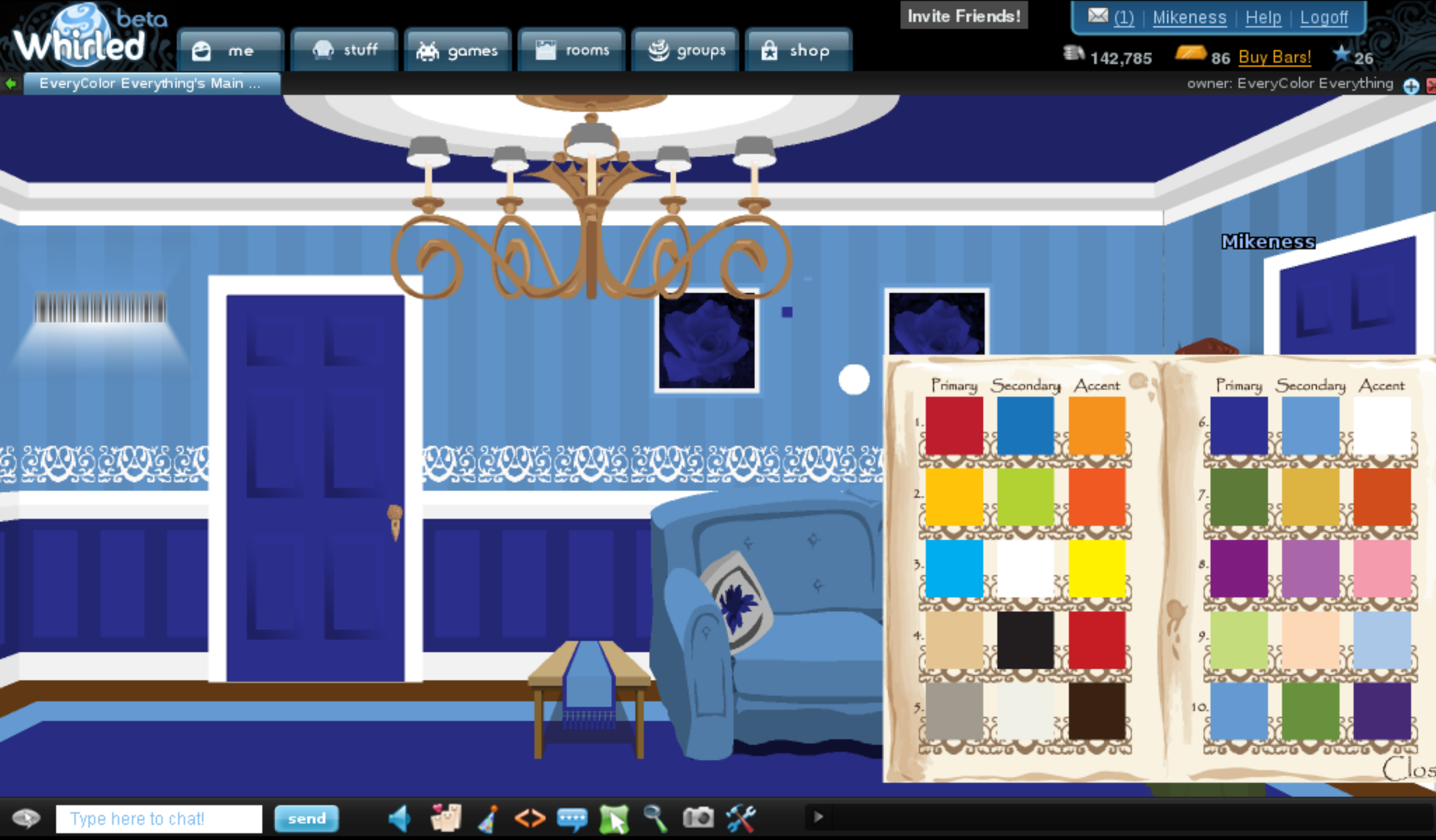
Whirled is Entities.



Entities are Avatars, Pets, Toys



even Furniture and Backdrops.



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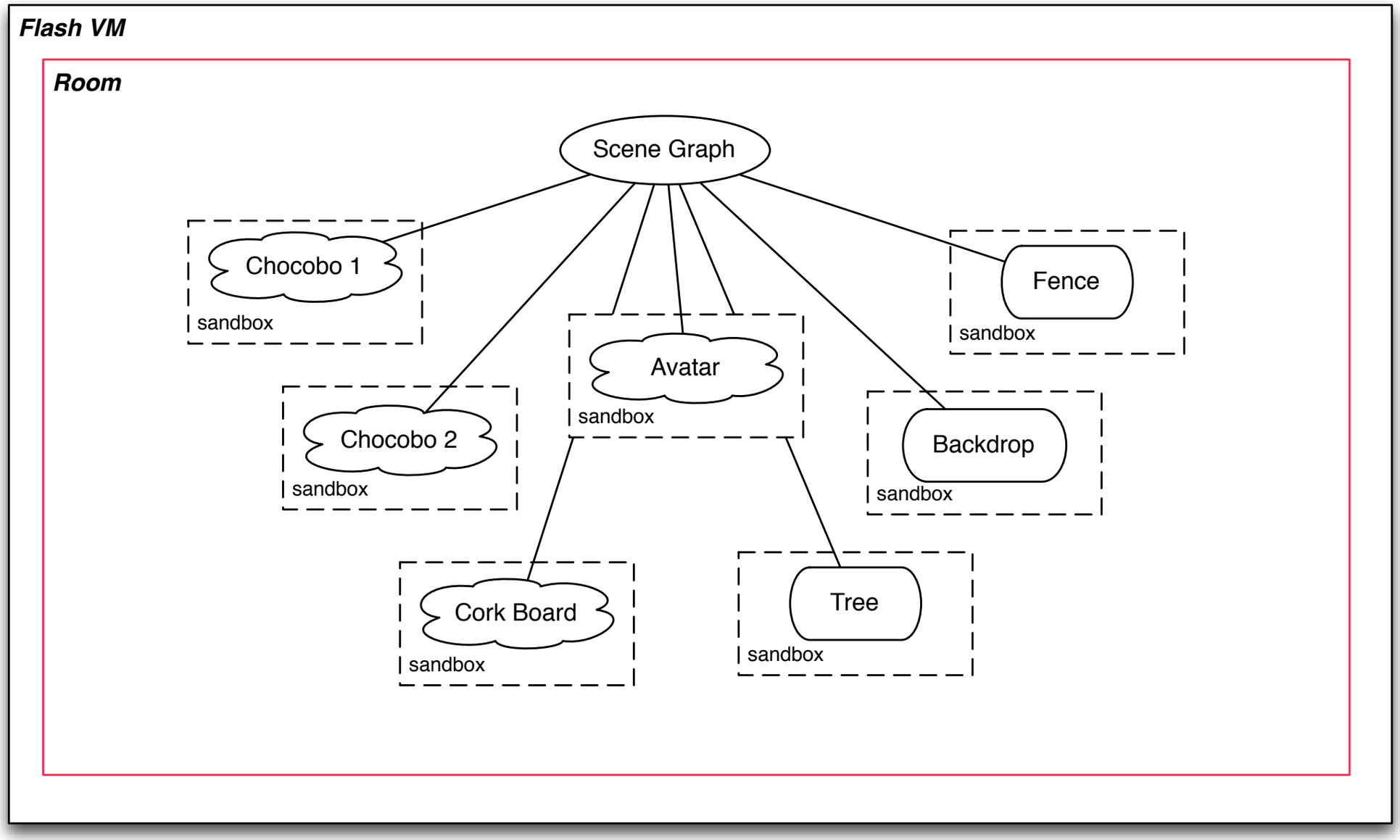
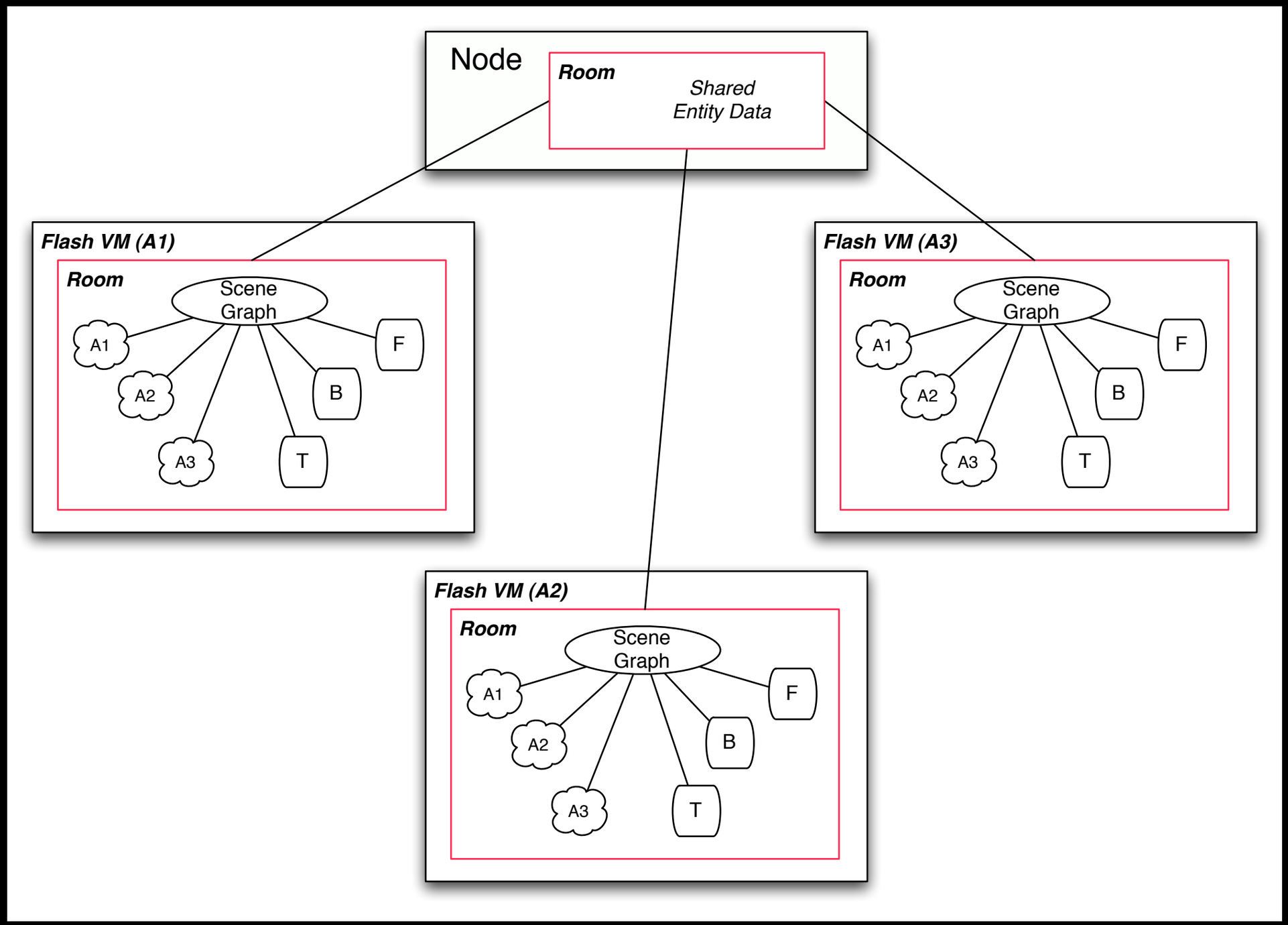
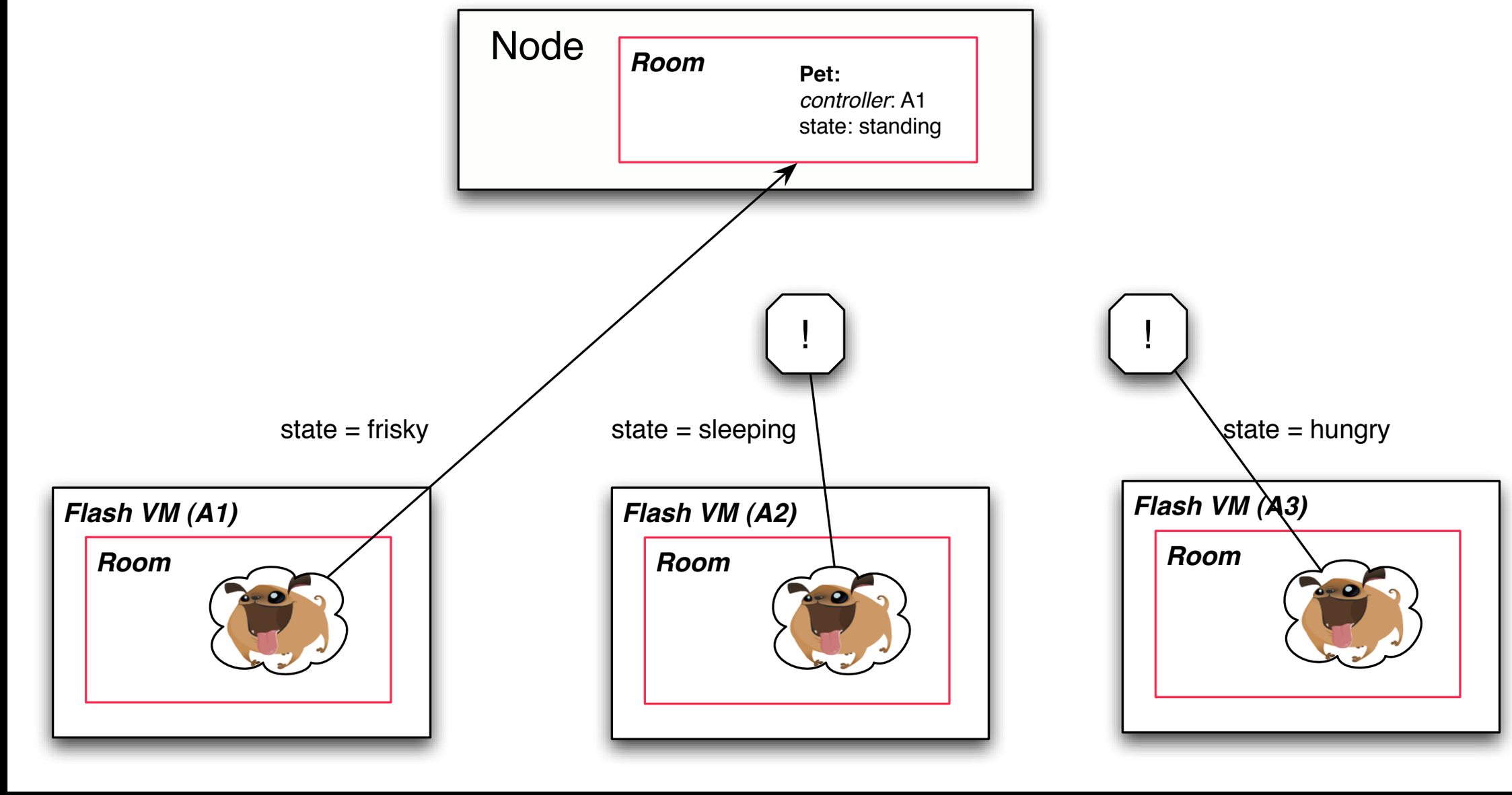


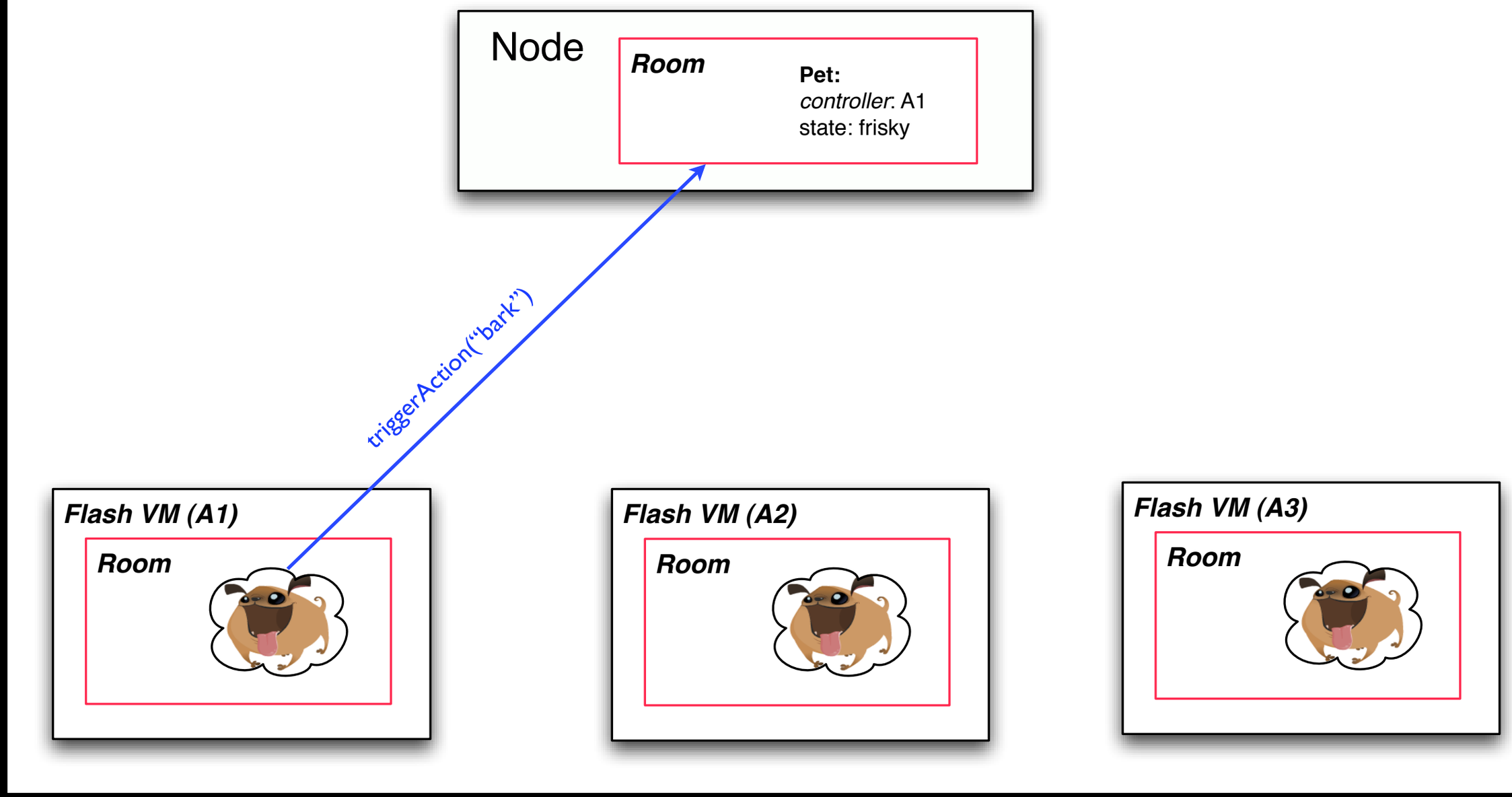
Code for entities runs on the client.



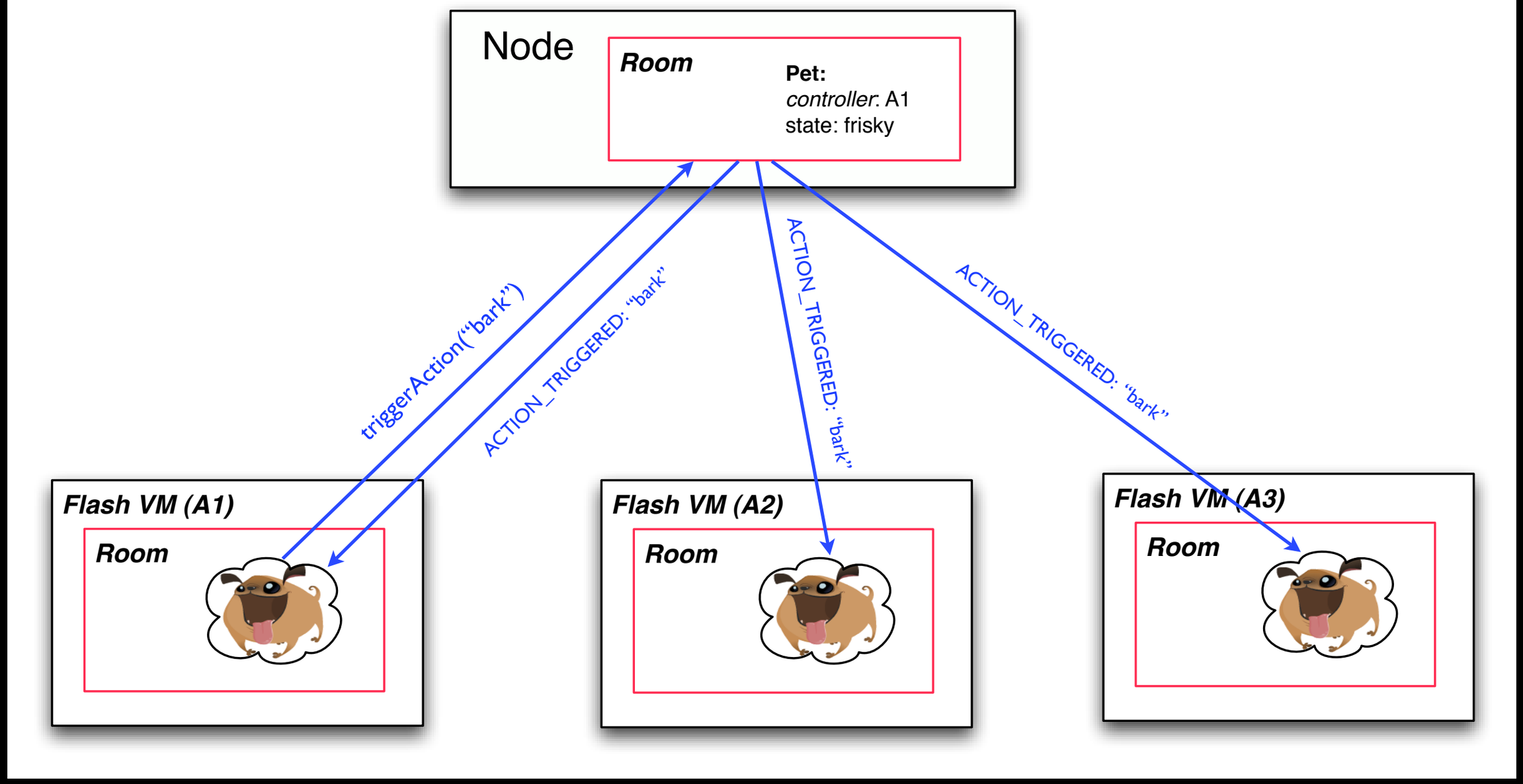
Actually, it runs on *all* clients.



We simplify with control


Node
Room
Pet:
controller: A1
state: frisky
triggerAction("bark")
Flash VM (A1)
Room
Flash VM (A2)
Room
Flash VM (A3)
Room

and actions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ACTION_TRIGGERED: "bark"
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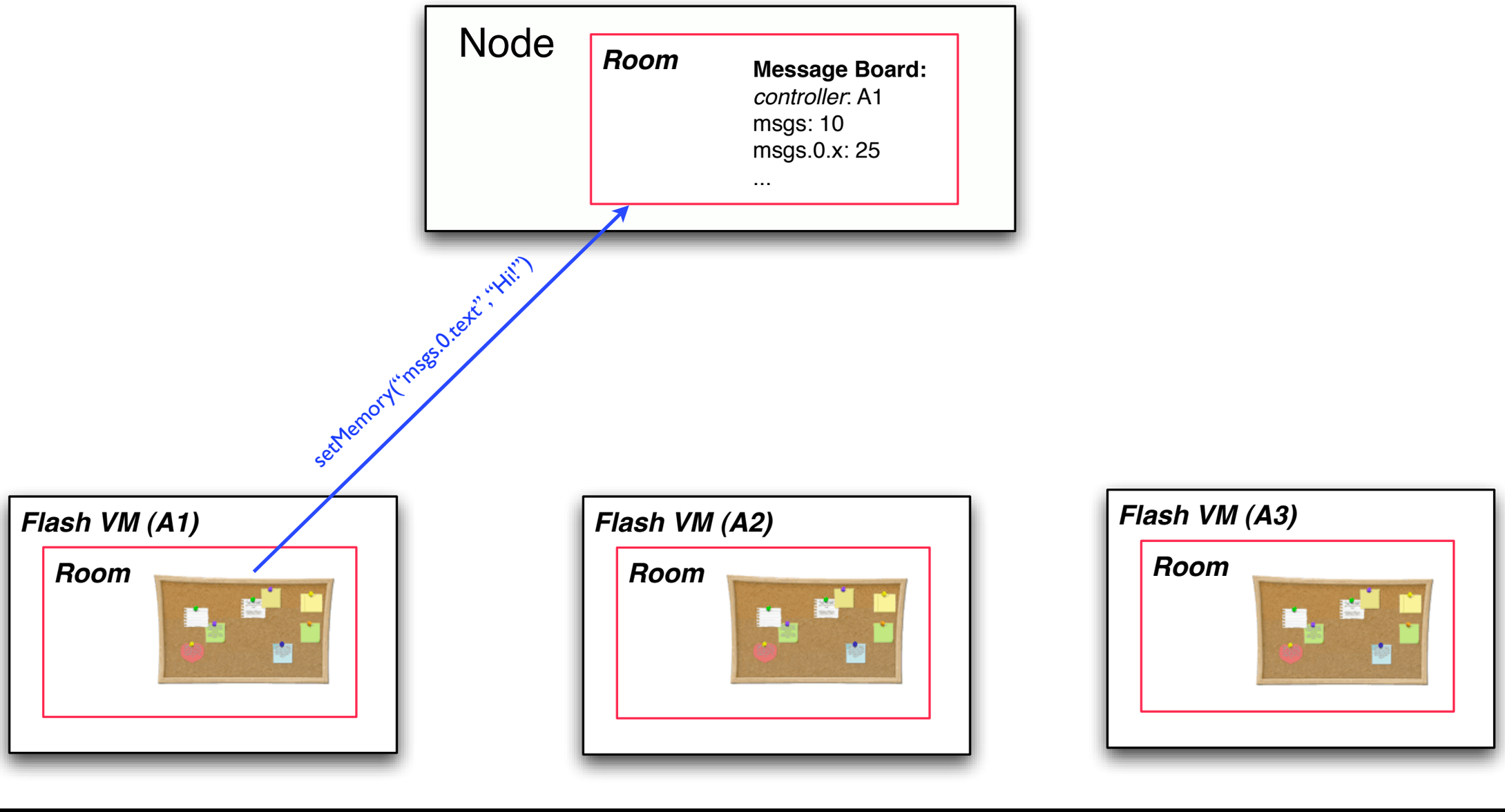
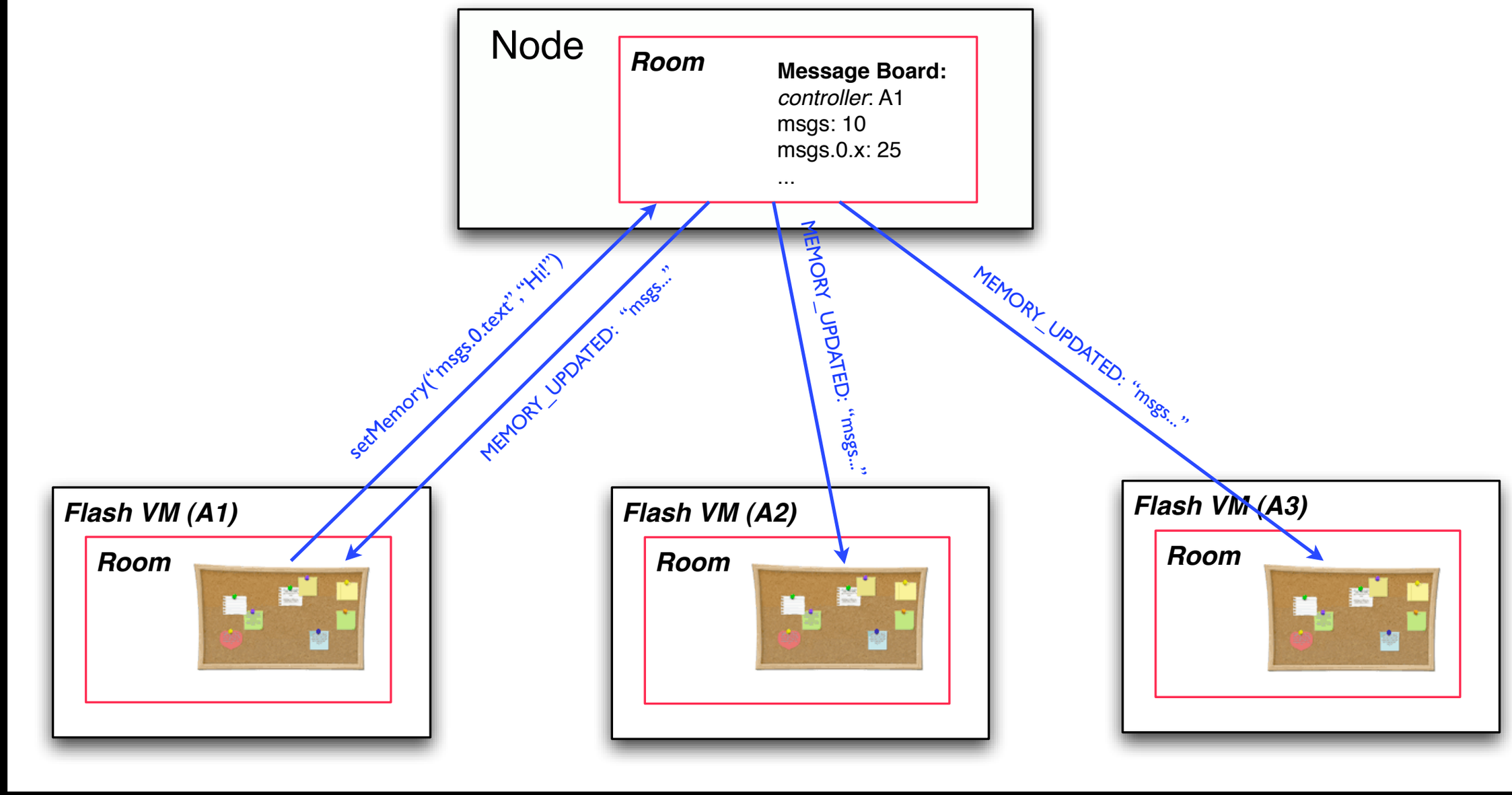
Flash VM (A1)
Room
Flash VM (A2)
Room
Flash VM (A3)
Room

and actions


Node
Room
Message Board:
controller: A1
msgs: 10
msgs.0.x: 25
...
setMemory("msgs.0.text", "Hi!")
Flash VM (A1)
Room
Flash VM (A2)
Room
Flash VM (A3)
Room

and memory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msgs.0.x: 25
...
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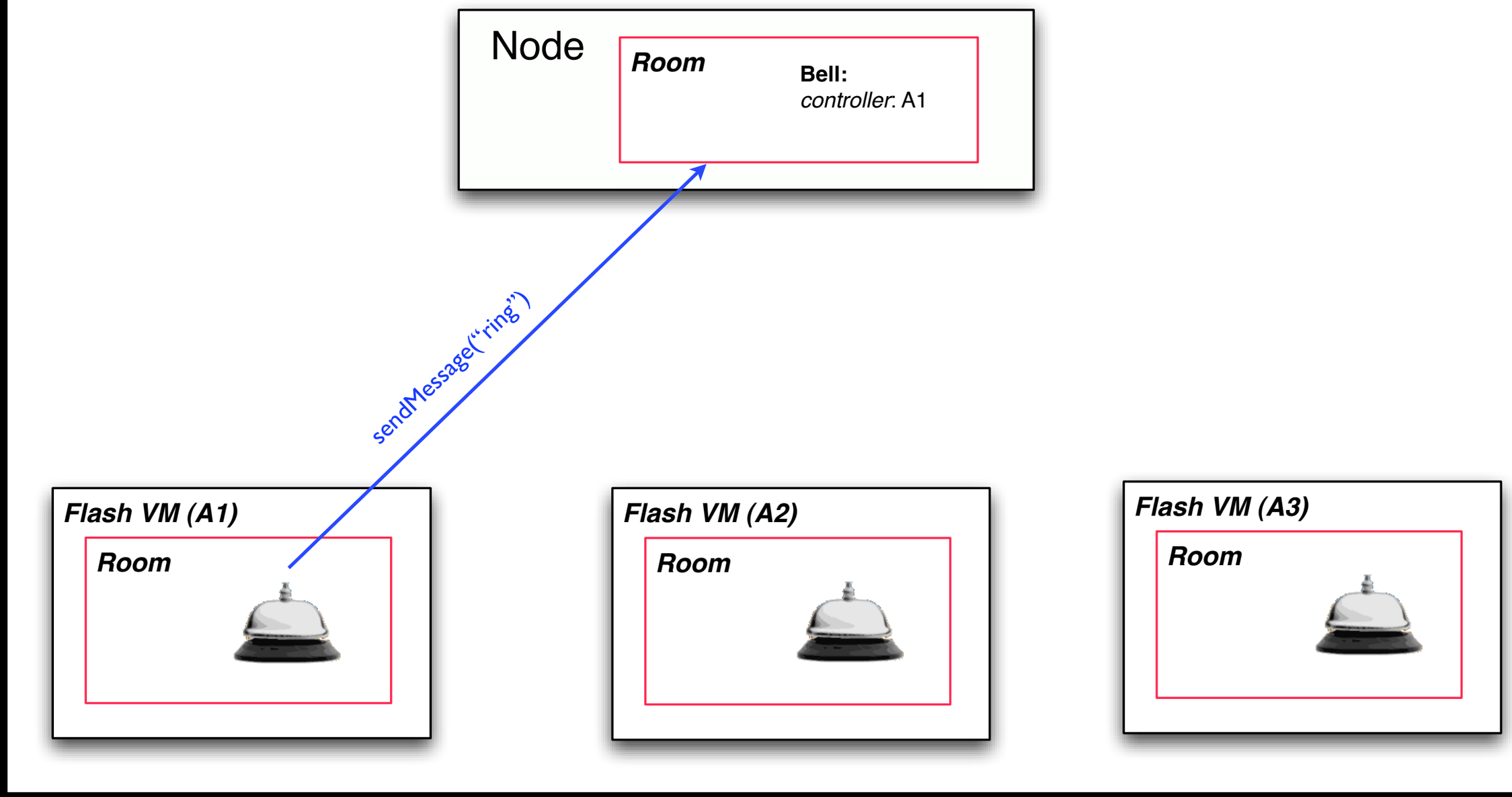
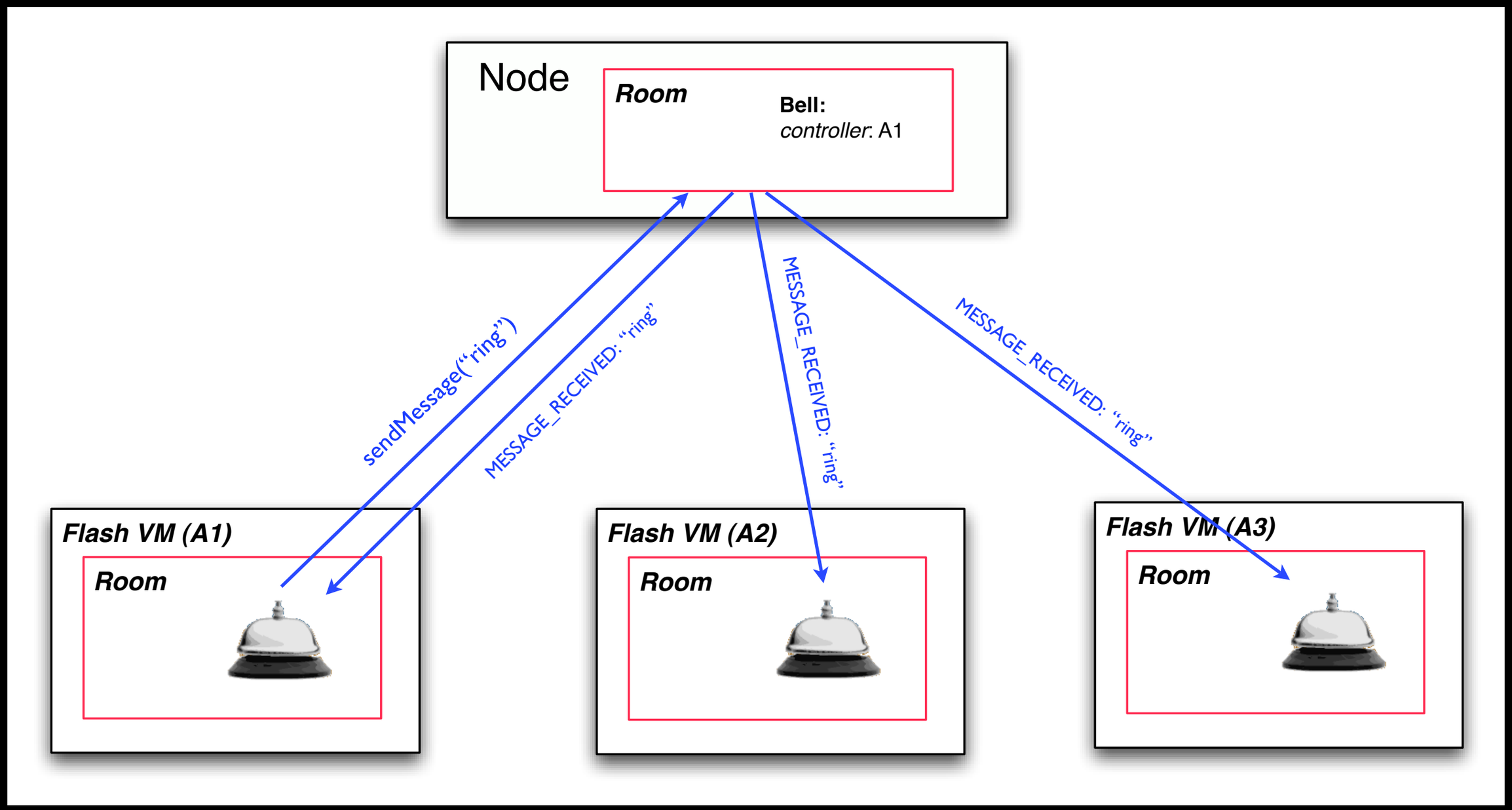
MEMORY_UPDATED: "msgs..."
MEMORY_UPDATED: "msgs..."
MEMORY_UPDATED: "msgs..."
Flash VM (A1)
Room
Flash VM (A2)
Room
Flash VM (A3)
Room

and memory



and messages and signals.



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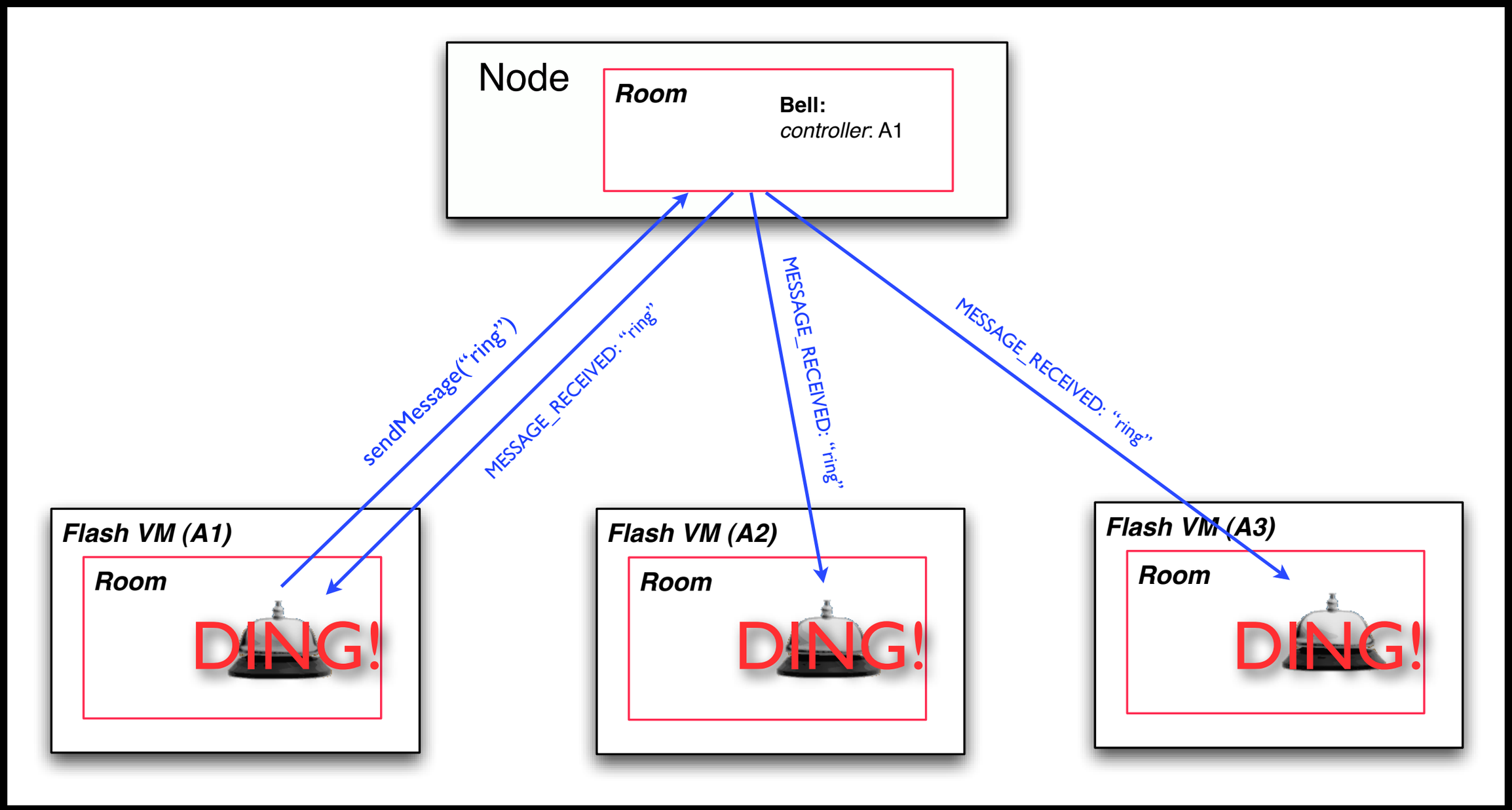

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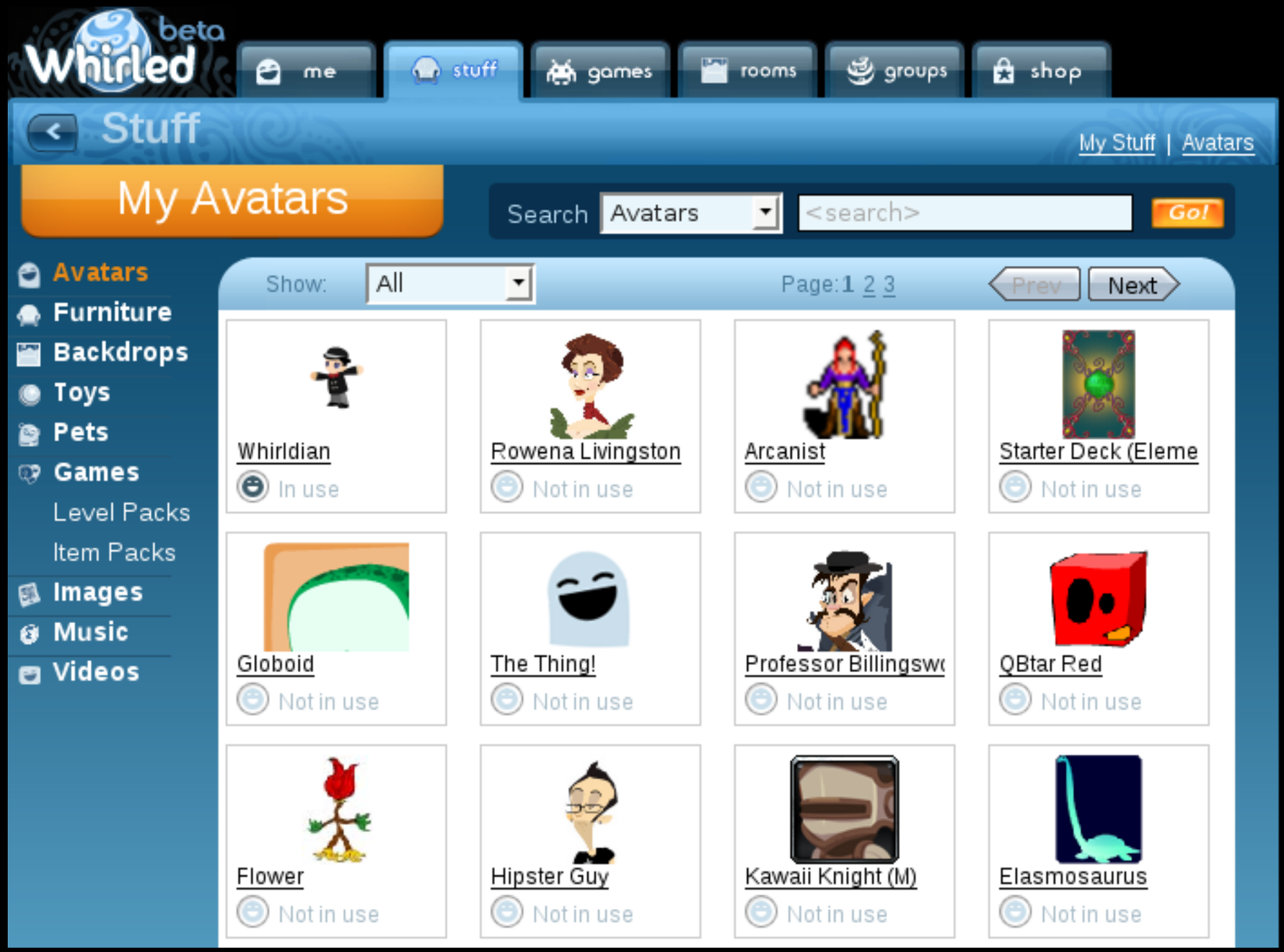
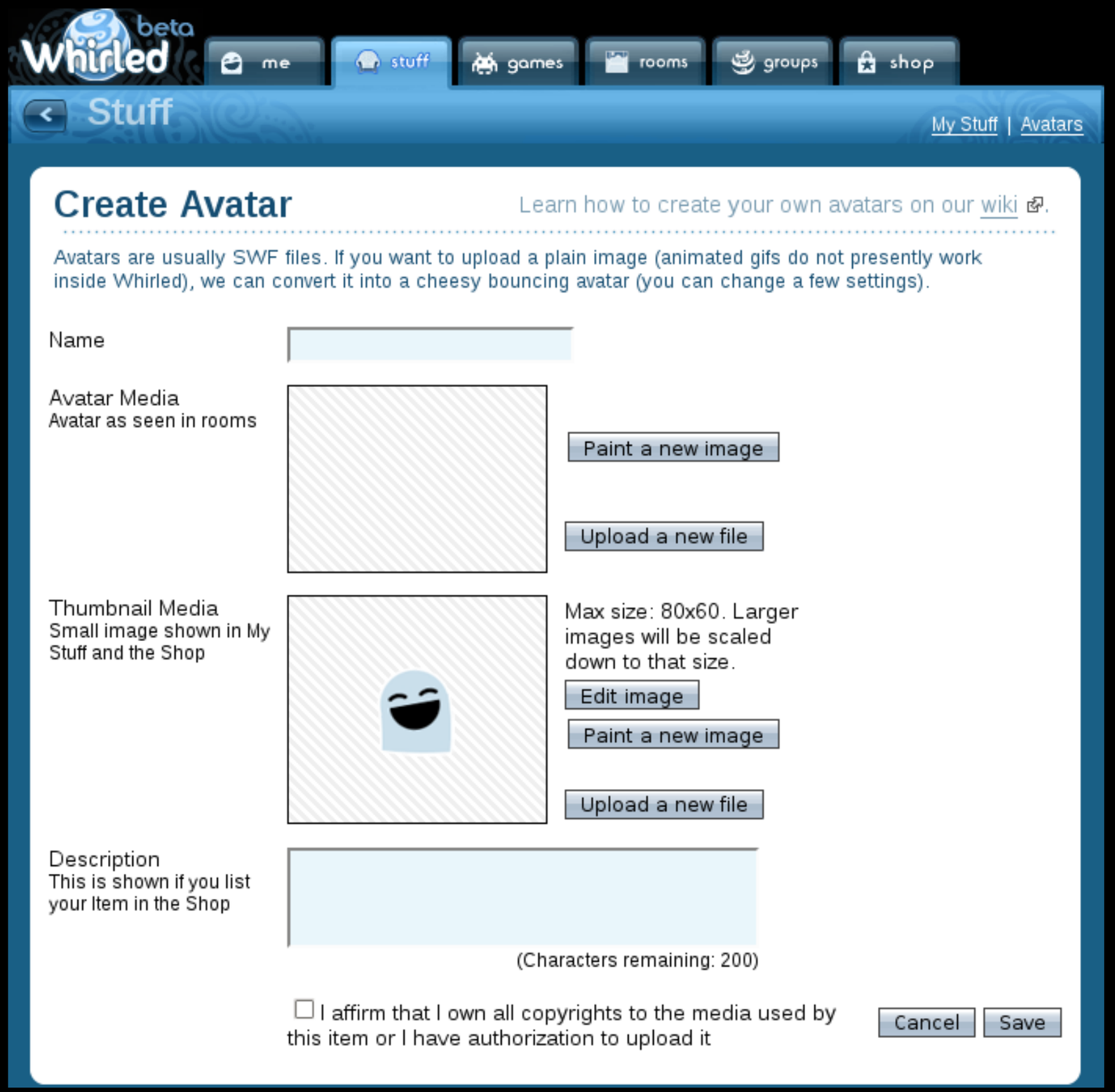
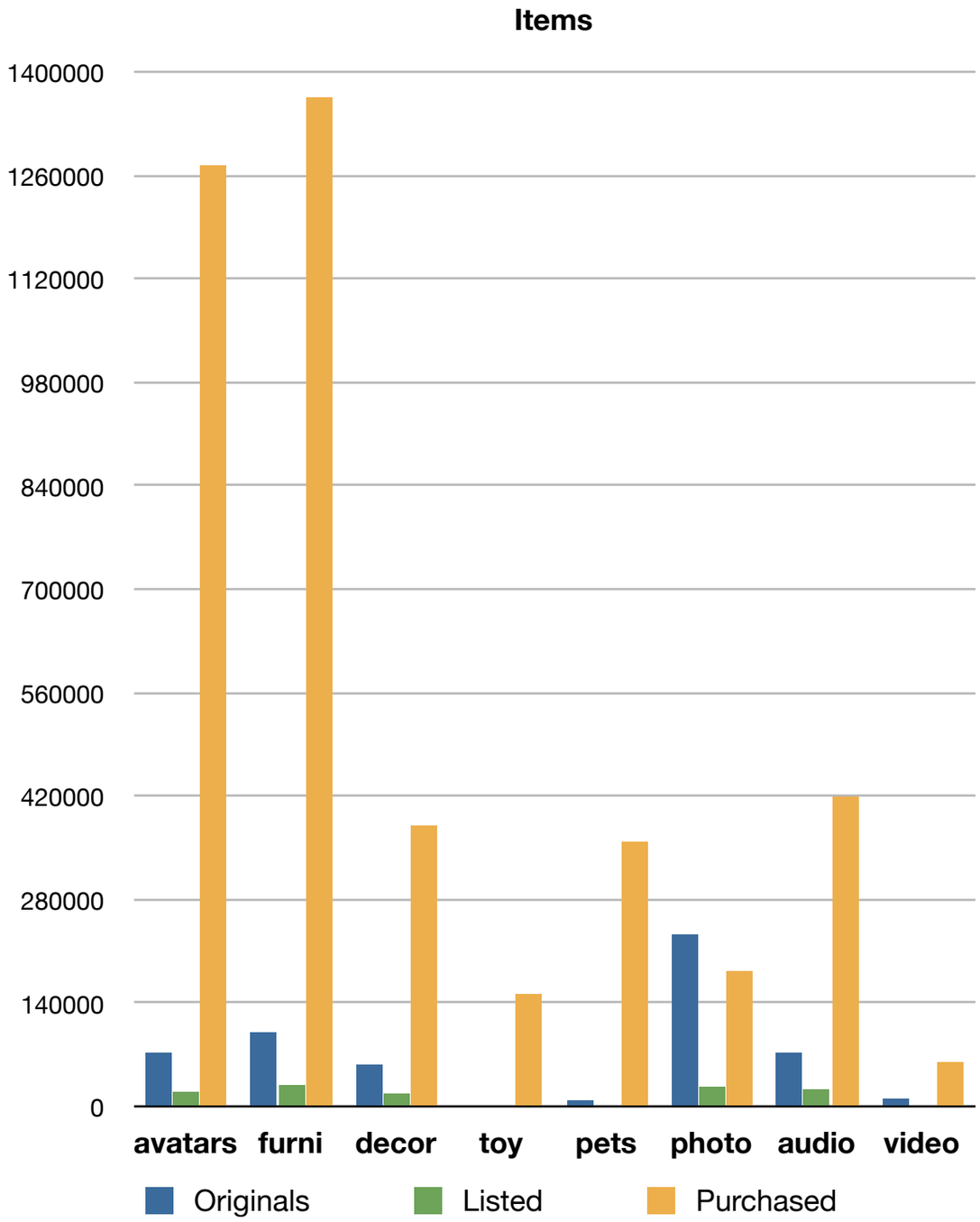
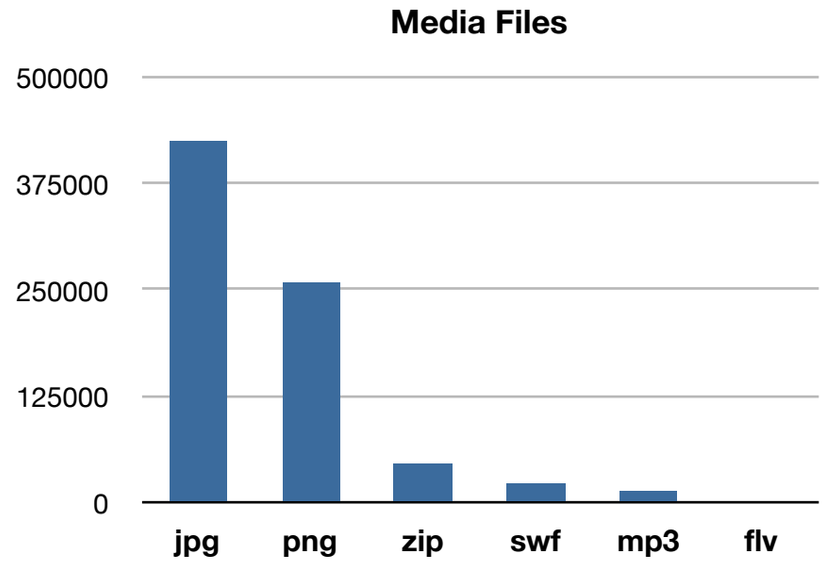


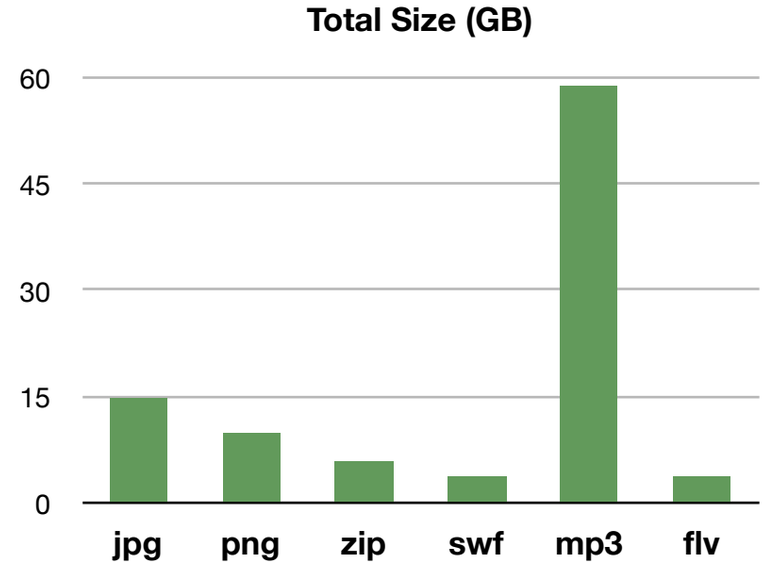
Whirled is Items.



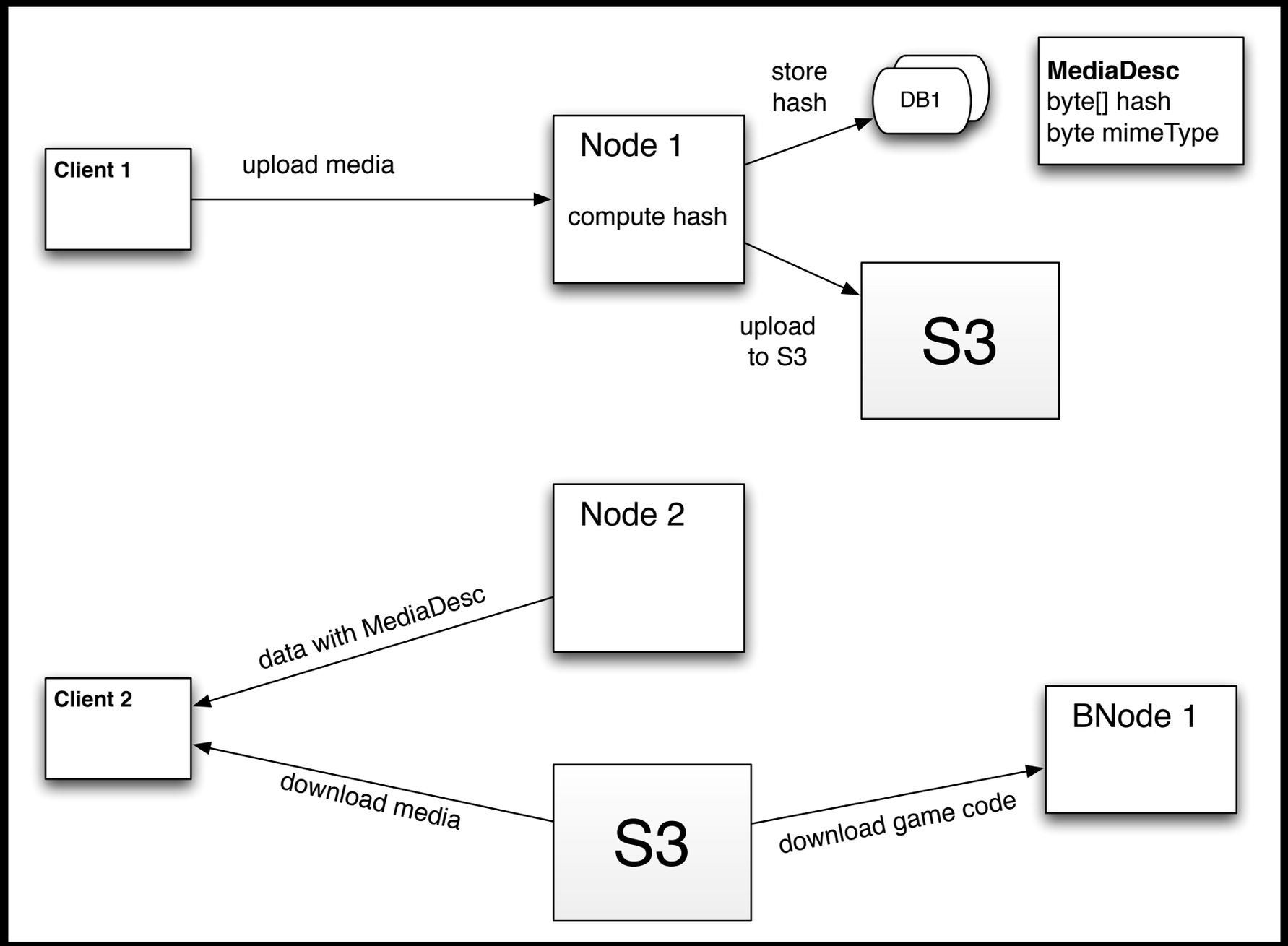
Items are created by users.







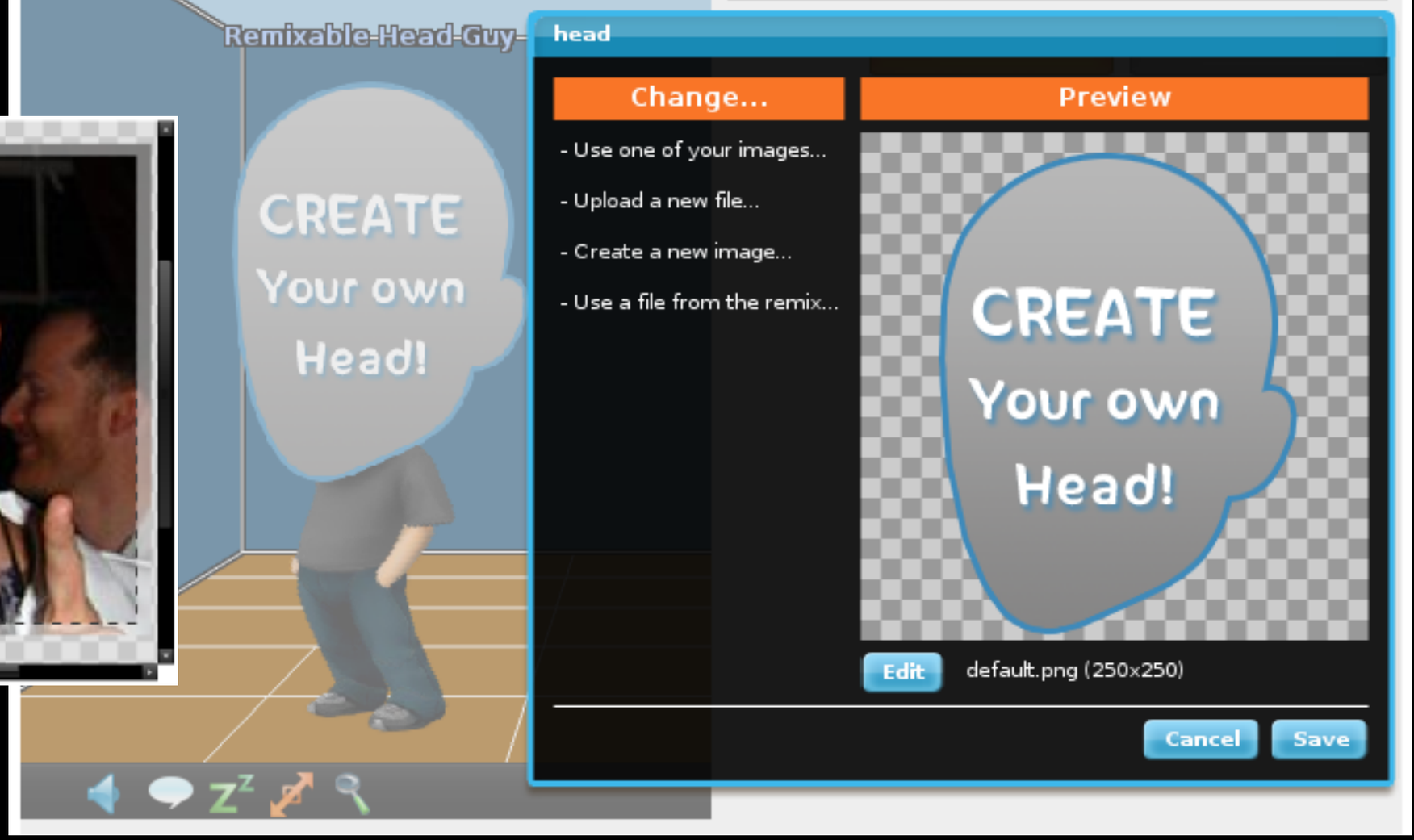
Users make lots of items.



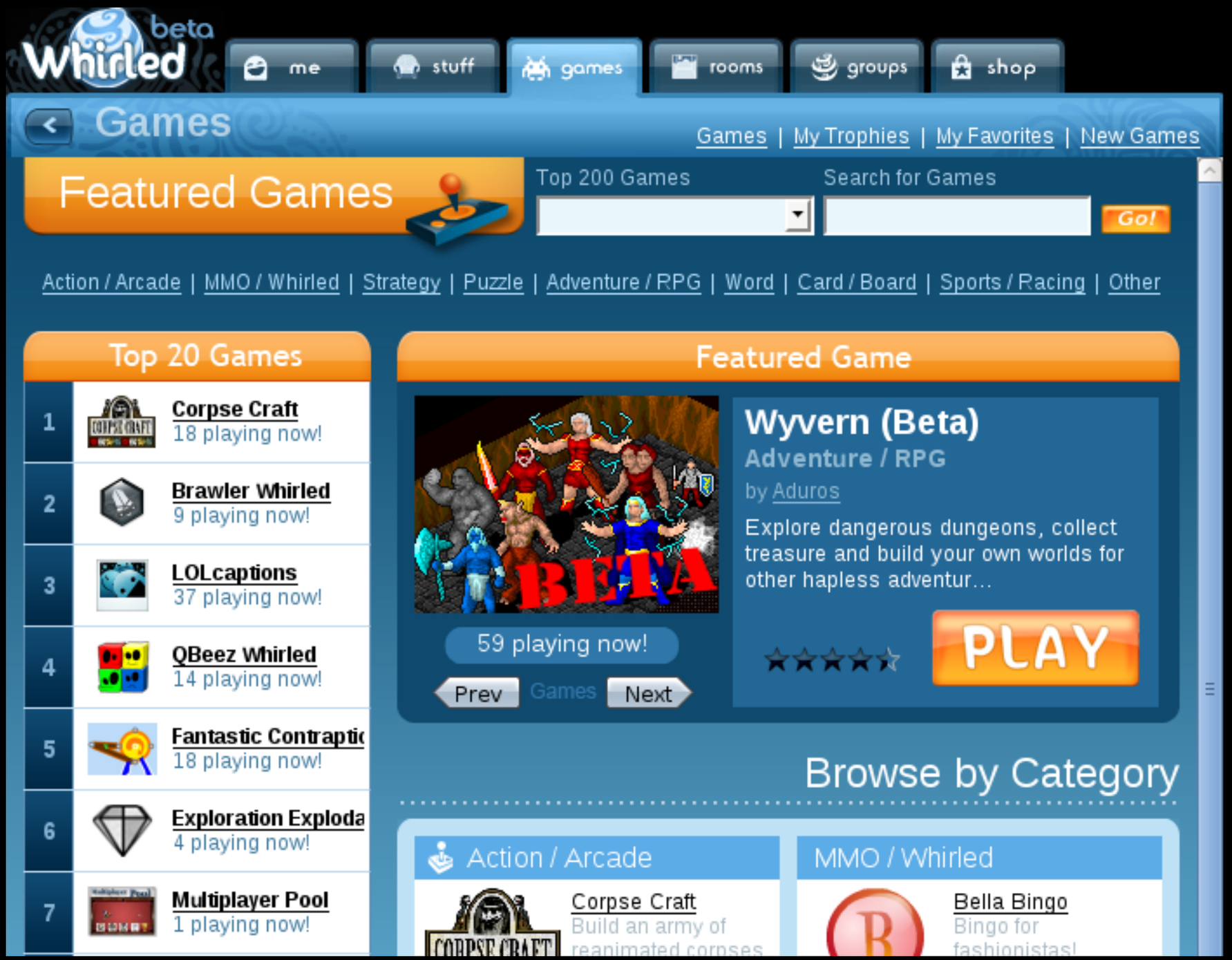
We keep all this data on S3.

Items can be remixed.

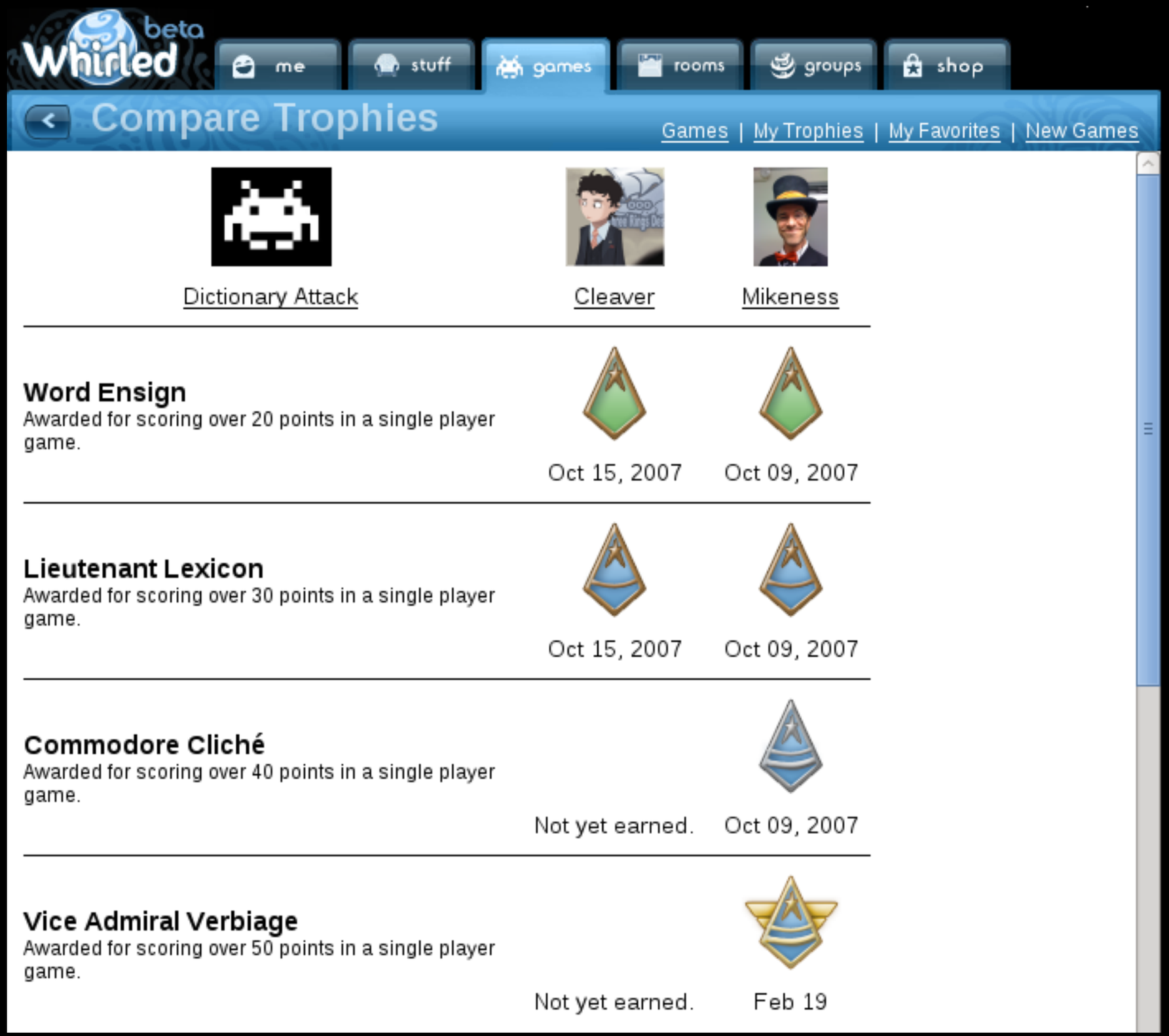
```
<datapack>
  <data name="bounciness" type="Number" value=".2" min="0" max="1"
        info="Determines how high the image should bounce during walking."/>
  <data name="bounceFrequency" type="Number" value="400" min="200" max="1000"
        info="The frequency of the bouncing, in milliseconds."/>
  <data name="imageFacesRight" type="Boolean" value="false"
        info="Indicates that the image defaultly faces right."/>
  <file name="image" type="DisplayObject" value="happyguy.png" maxWidth="600" maxHeight="450"
        info="The image that makes up this avatar."/>
  <file name="_CONTENT" type="Blob" value="ImageFlipper.swf"/>
</datapack>
```



This is mostly some editors
and a file format.



Whirled is Games.



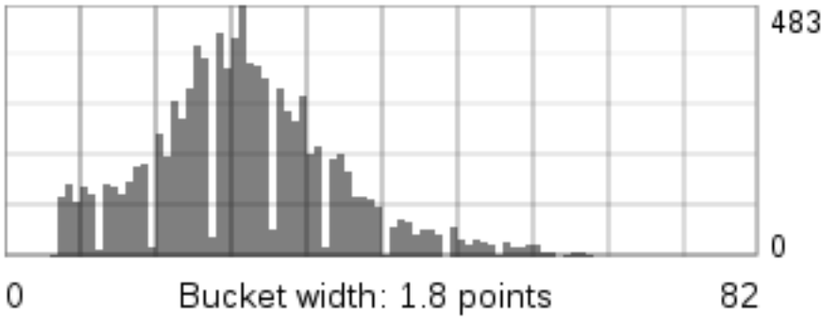
Games can award trophies, prizes.

Games can sell content packs.

Instructions | Comments | Trophies | My Rankings | Top Rankings | Metrics | Logs

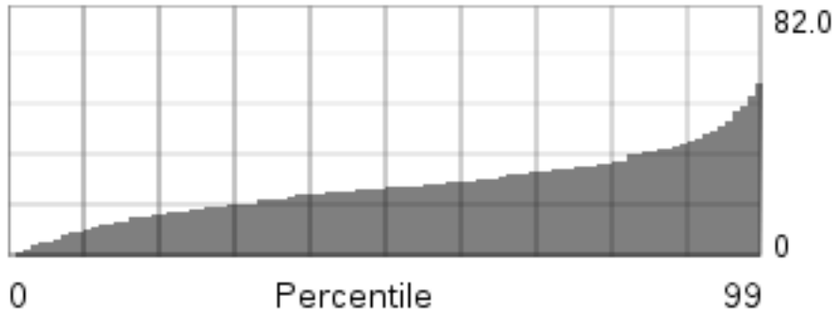
Single-player Score Distribution

This graph shows the distribution of all scores reported by your game, sorted into buckets.



Total scores recorded: 10067

This graph displays the score necessary to achieve a particular percentile.

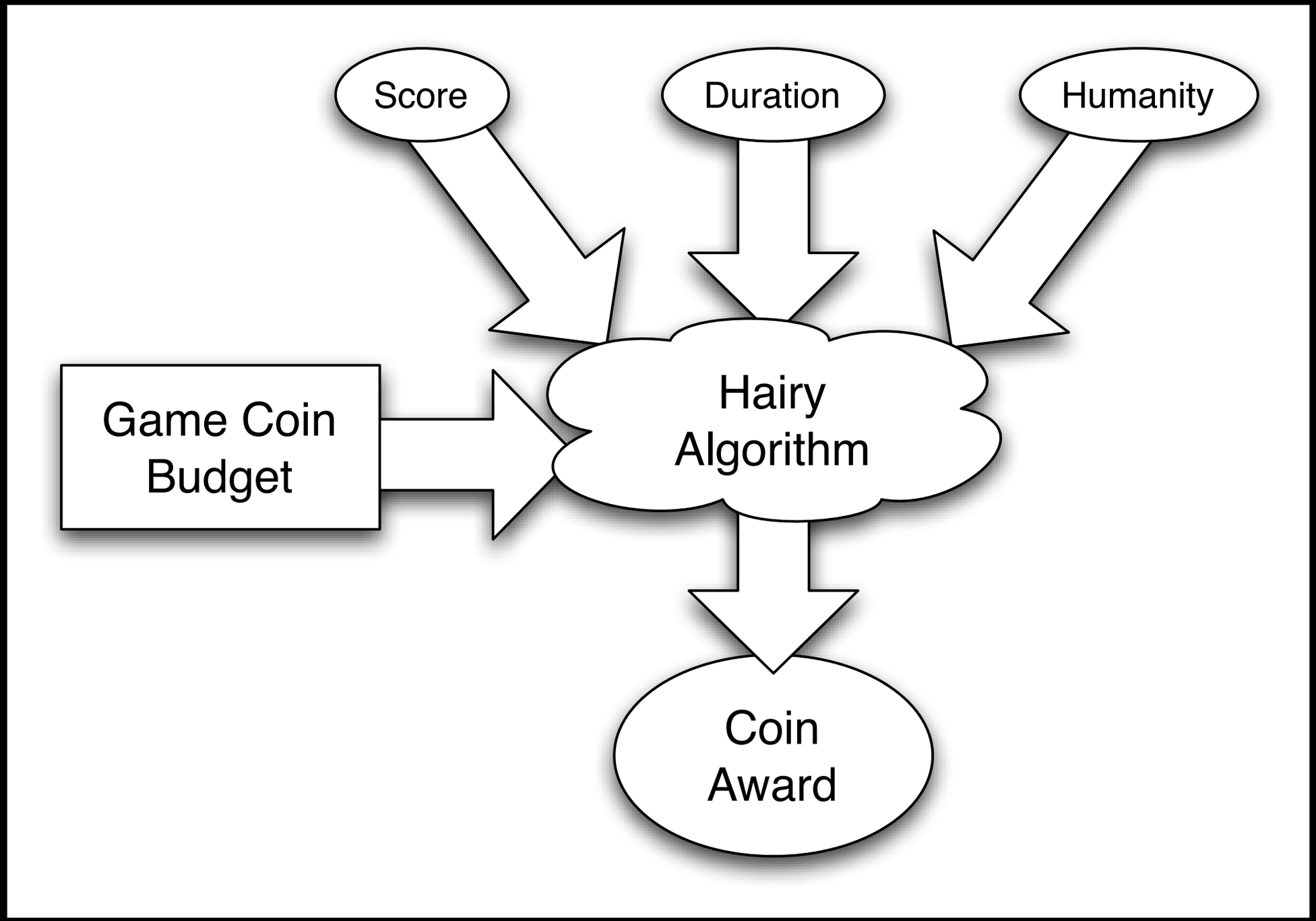


Score needed for 99th percentile:
56.77000045776367

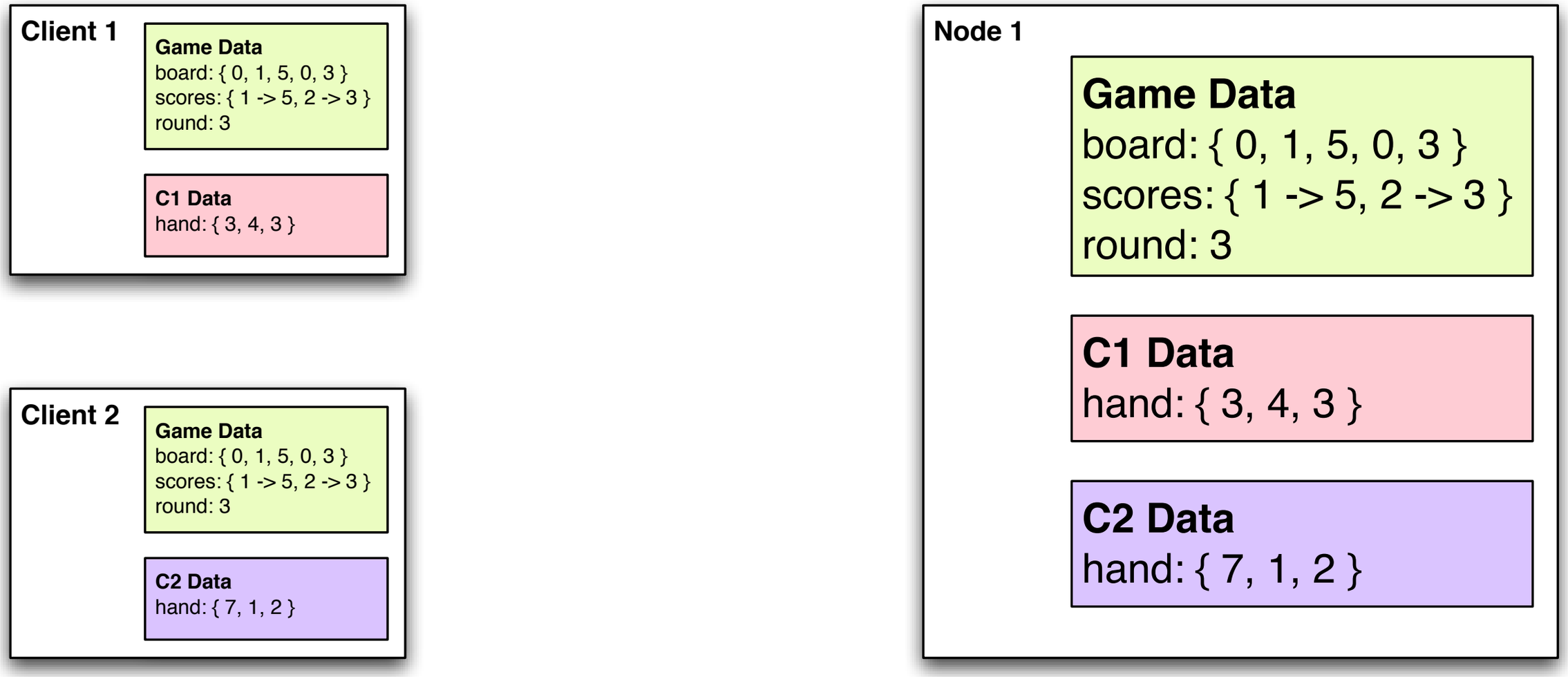
Instructions | Comments | Trophies | My Rankings | Top Rankings | Metrics | Logs

	Single Player	Rating		Multiplayer	Rating
#1	Jes	2508	#1	Jes	1466
#2	**Mikeness**	**2237**	**#2**	**Mikeness**	**1355**
#3	Nemo	2216	#3	Ex-Billiam	1206
#4	mupparina	2202	#4	Silver	1181
#5	Zell	2173	#5	Cleaver	1170
#6	Comrade Anniya	2121	#6	Jack Green	1165
#7	Zefyr	1853	#7	Zefyr	1153
#8	Silver	1823	#8	Cherub	1118
#9	Brittney	1792	#9	mupparina	1034
#10	Aduros	1630			

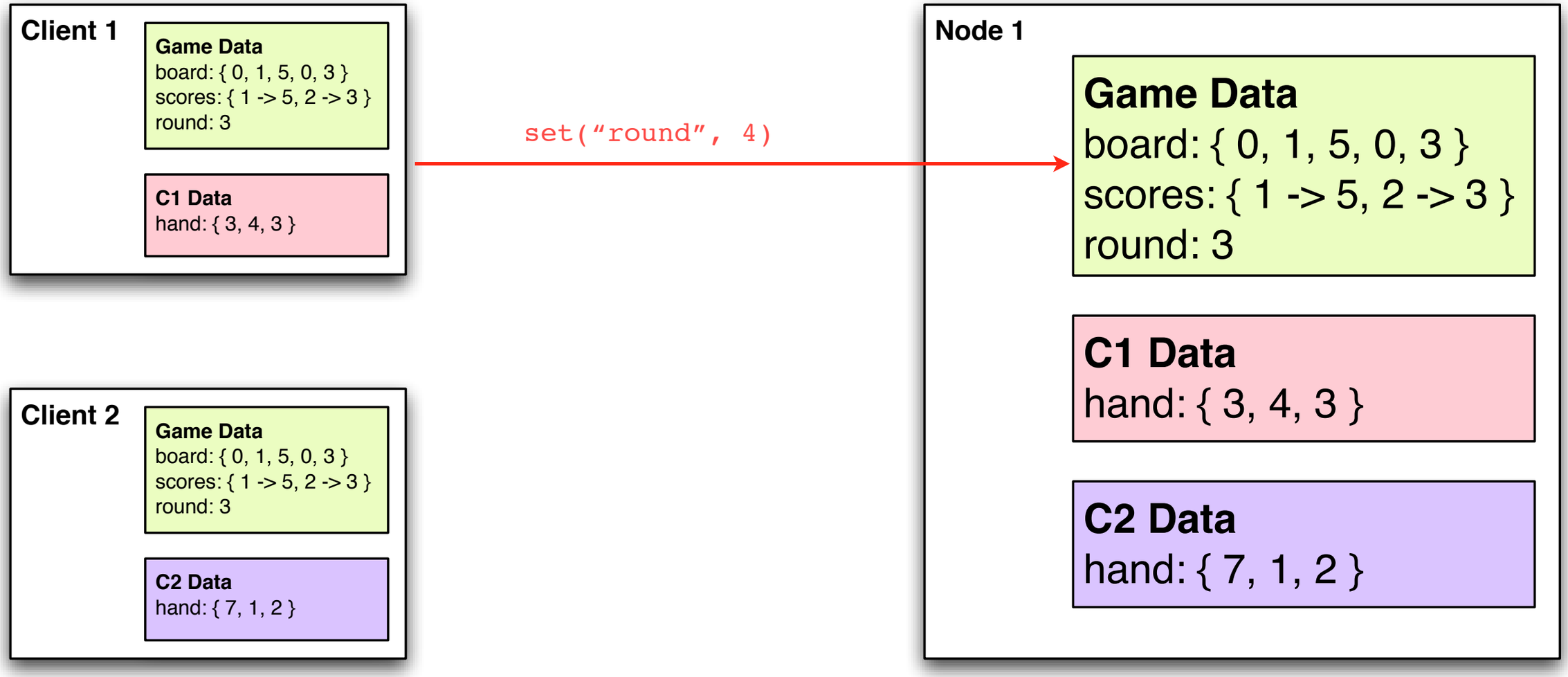
We handle single- and multiplayer ratings



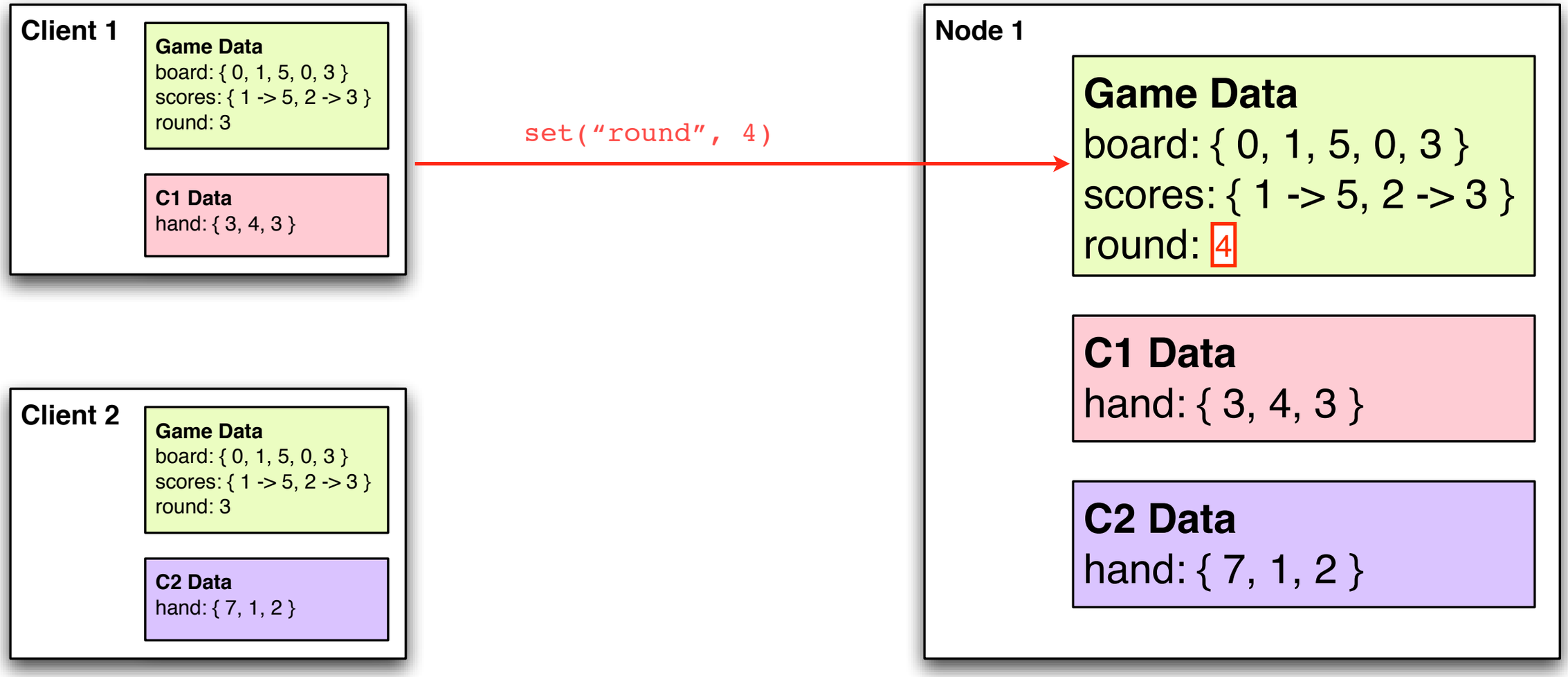
and the complexities
of currency awarding.



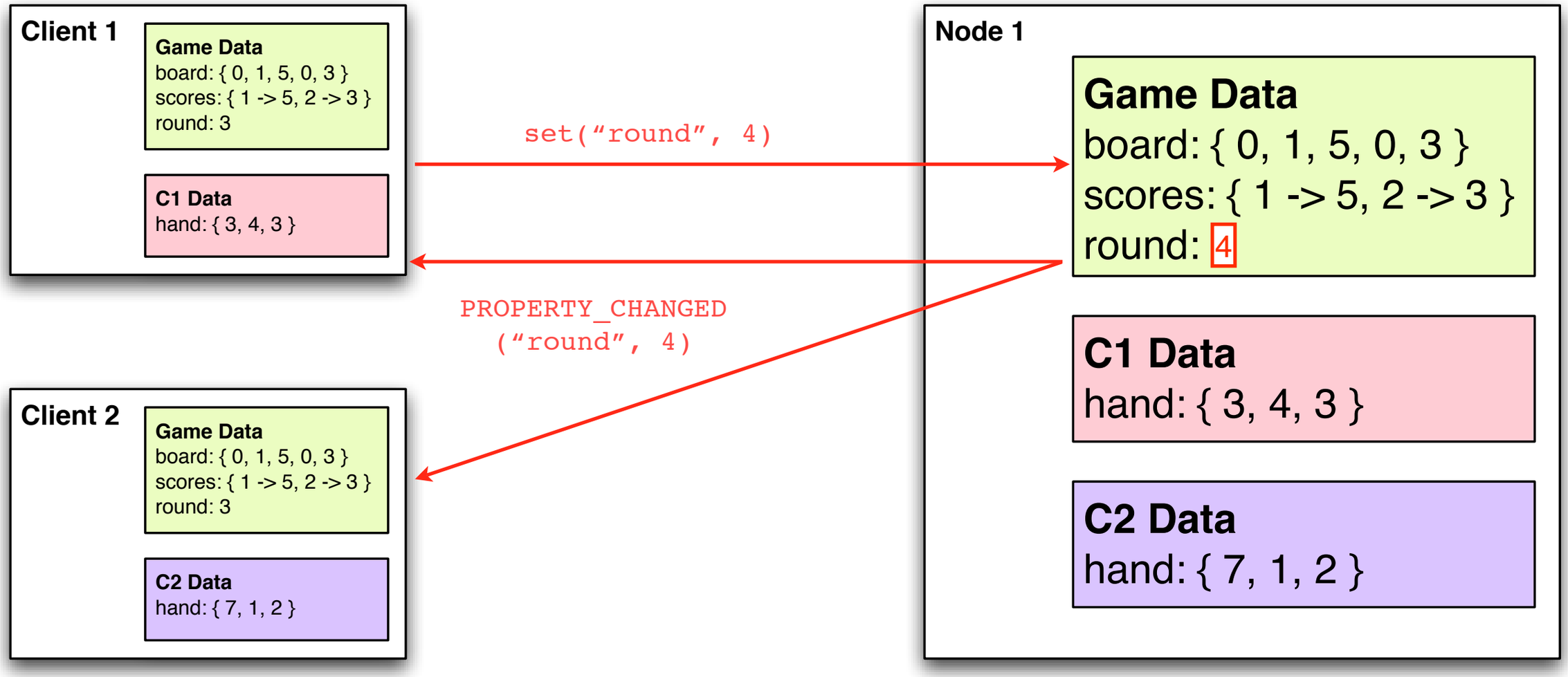
Games can use multiplayer API.



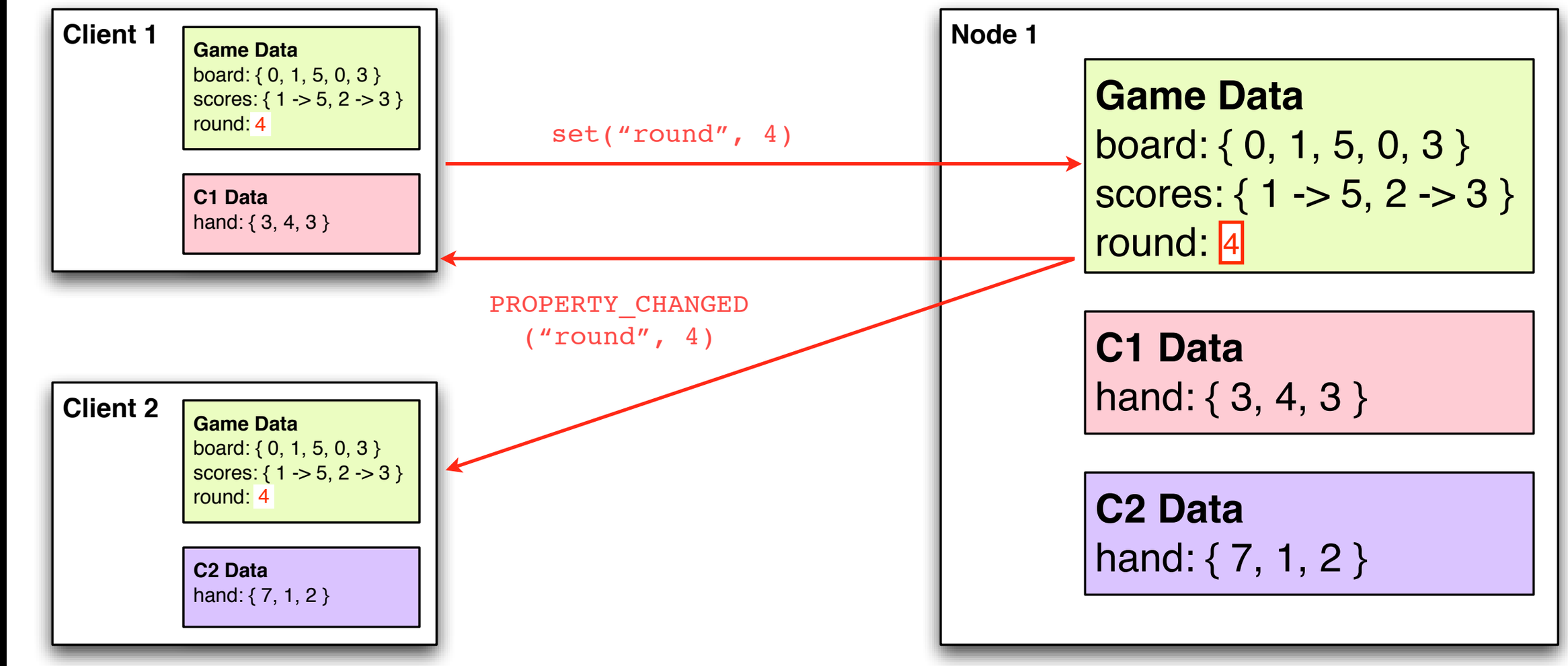
Games can use multiplayer API.



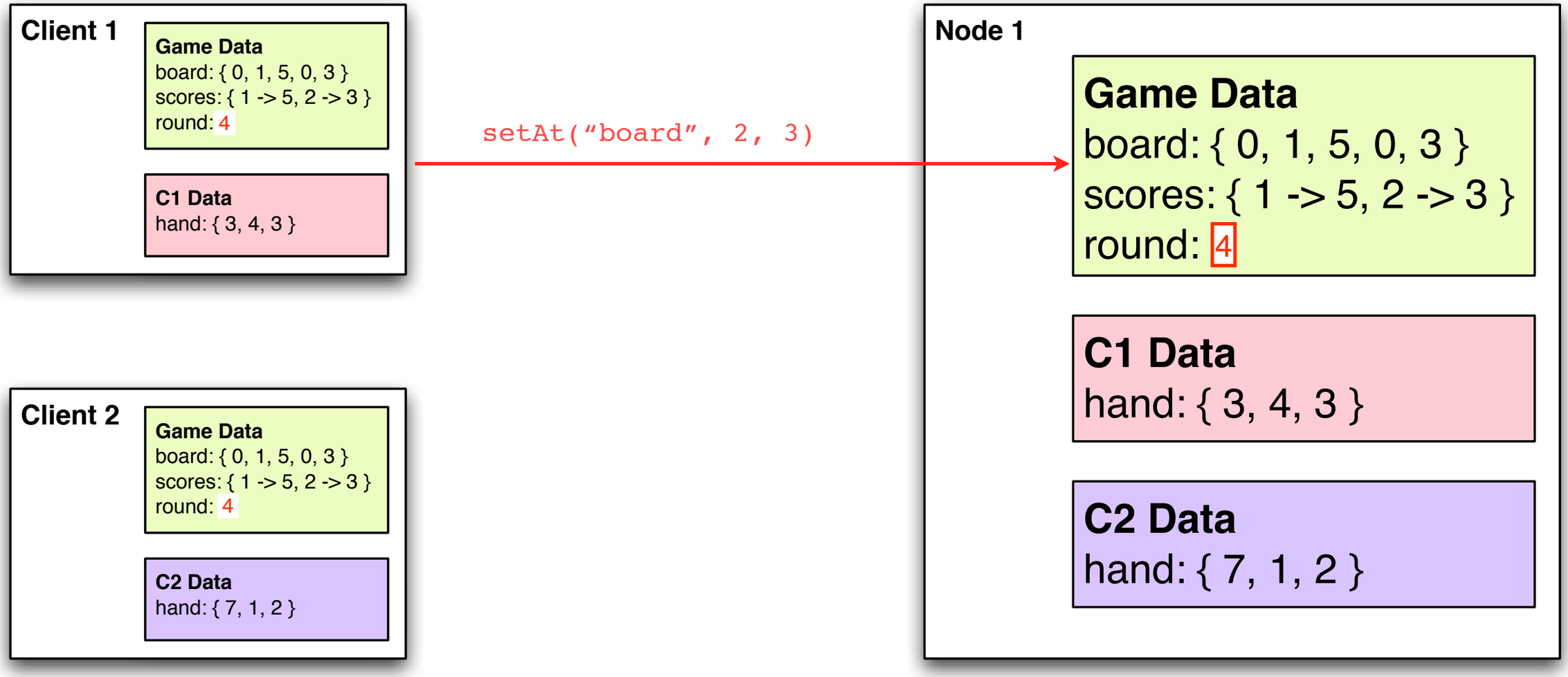
Games can use multiplayer API.



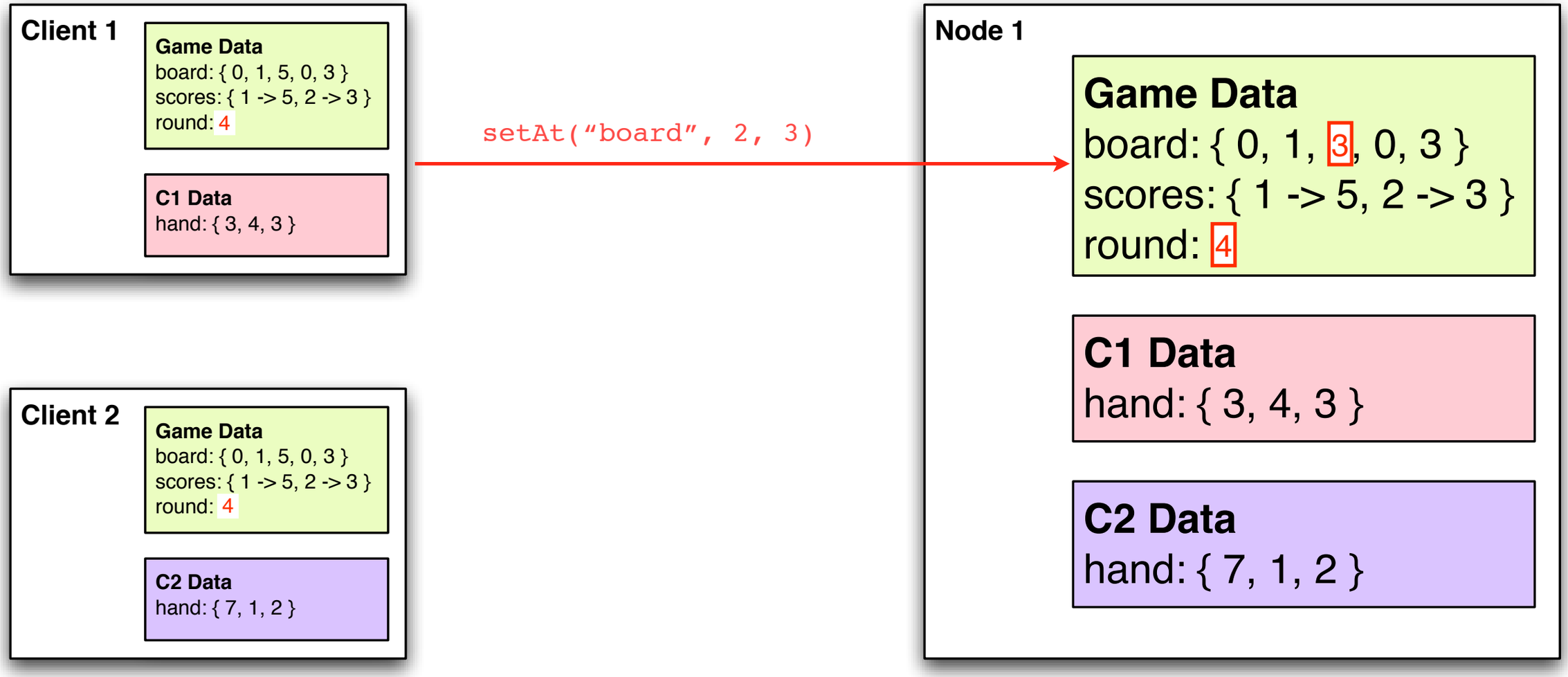
Games can use multiplayer API.



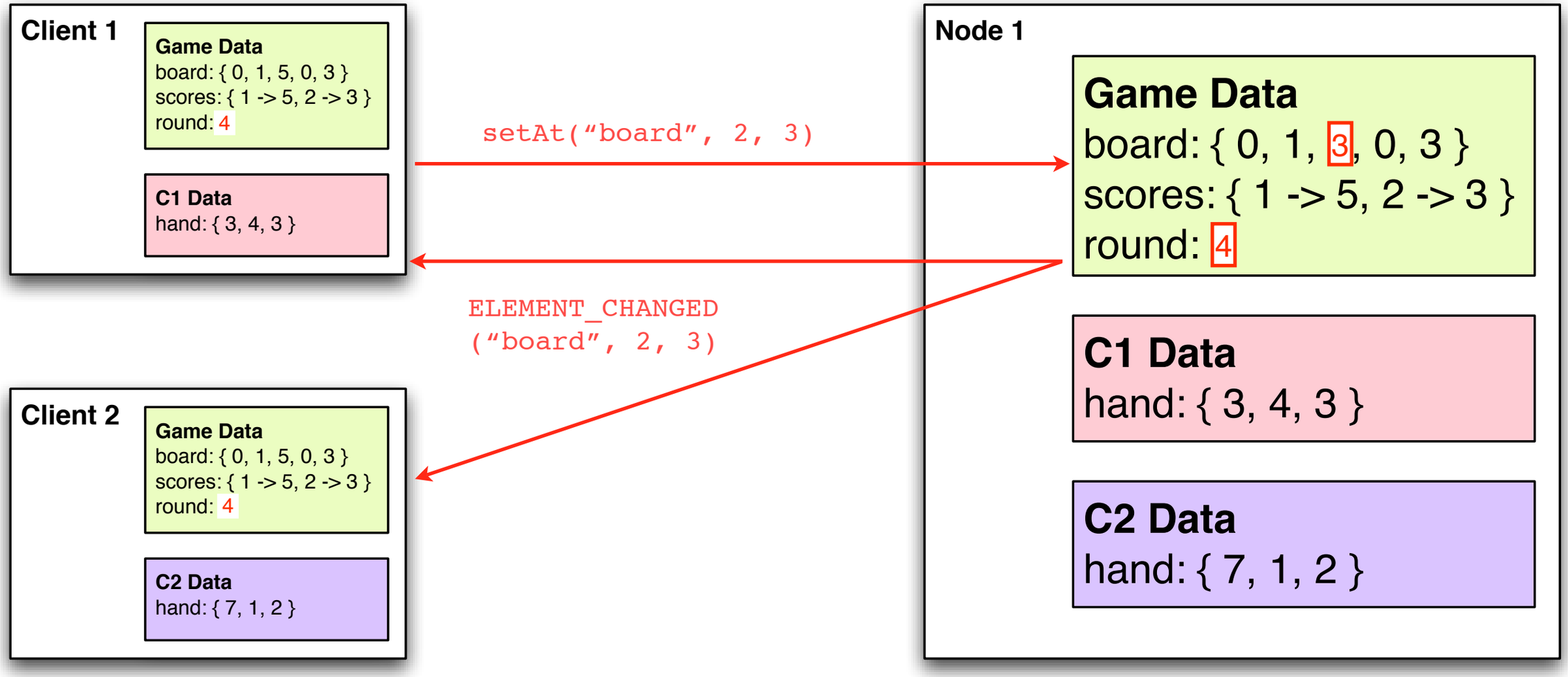
Games can use multiplayer API.



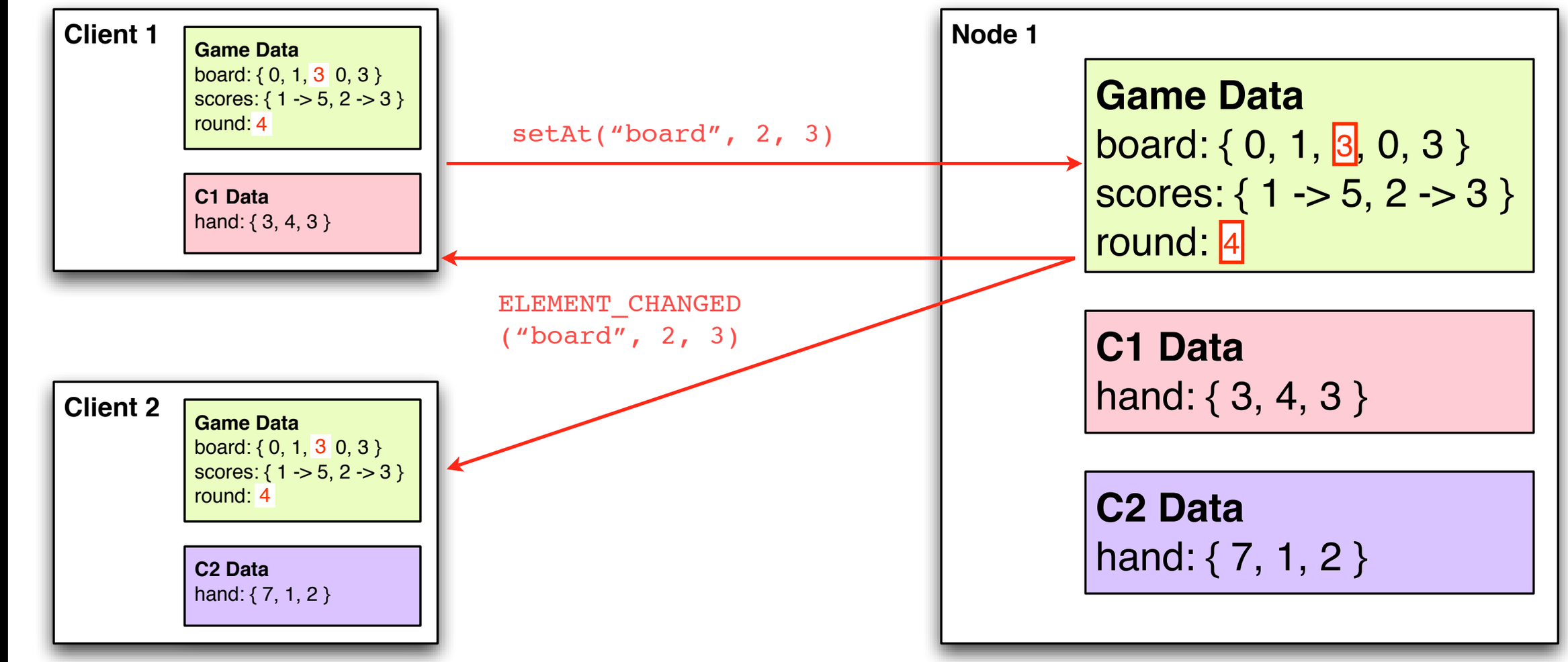
Games can use multiplayer API.



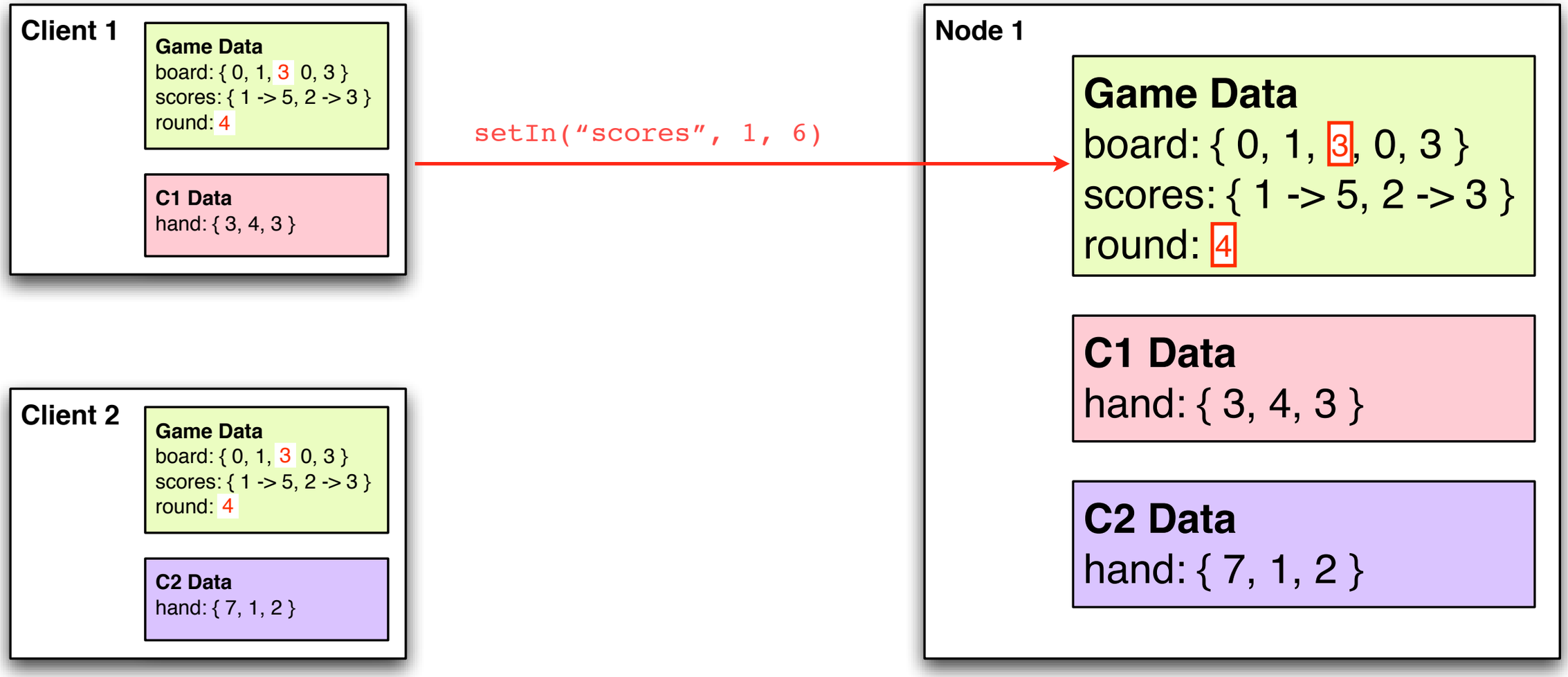
Games can use multiplayer API.



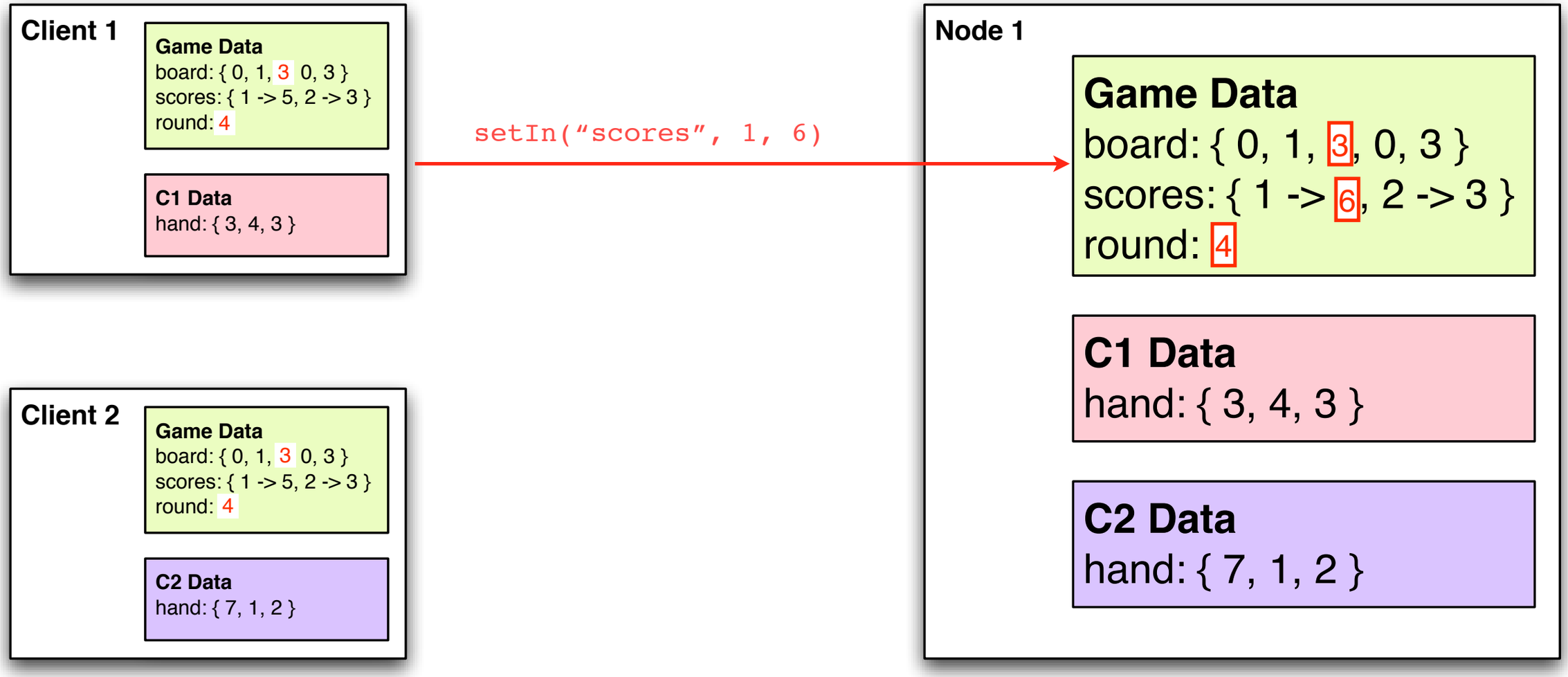
Games can use multiplayer API.



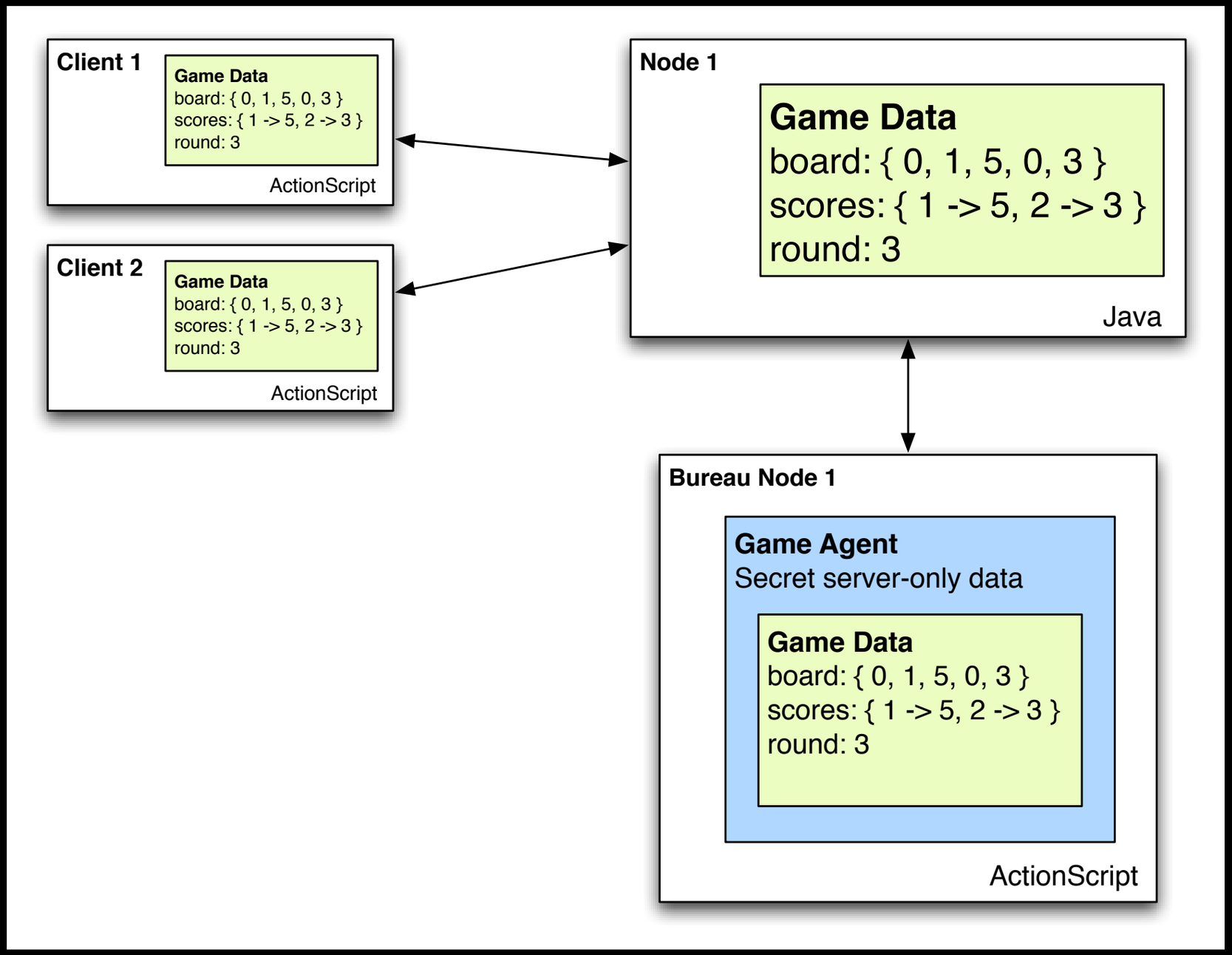
Games can use multiplayer API.



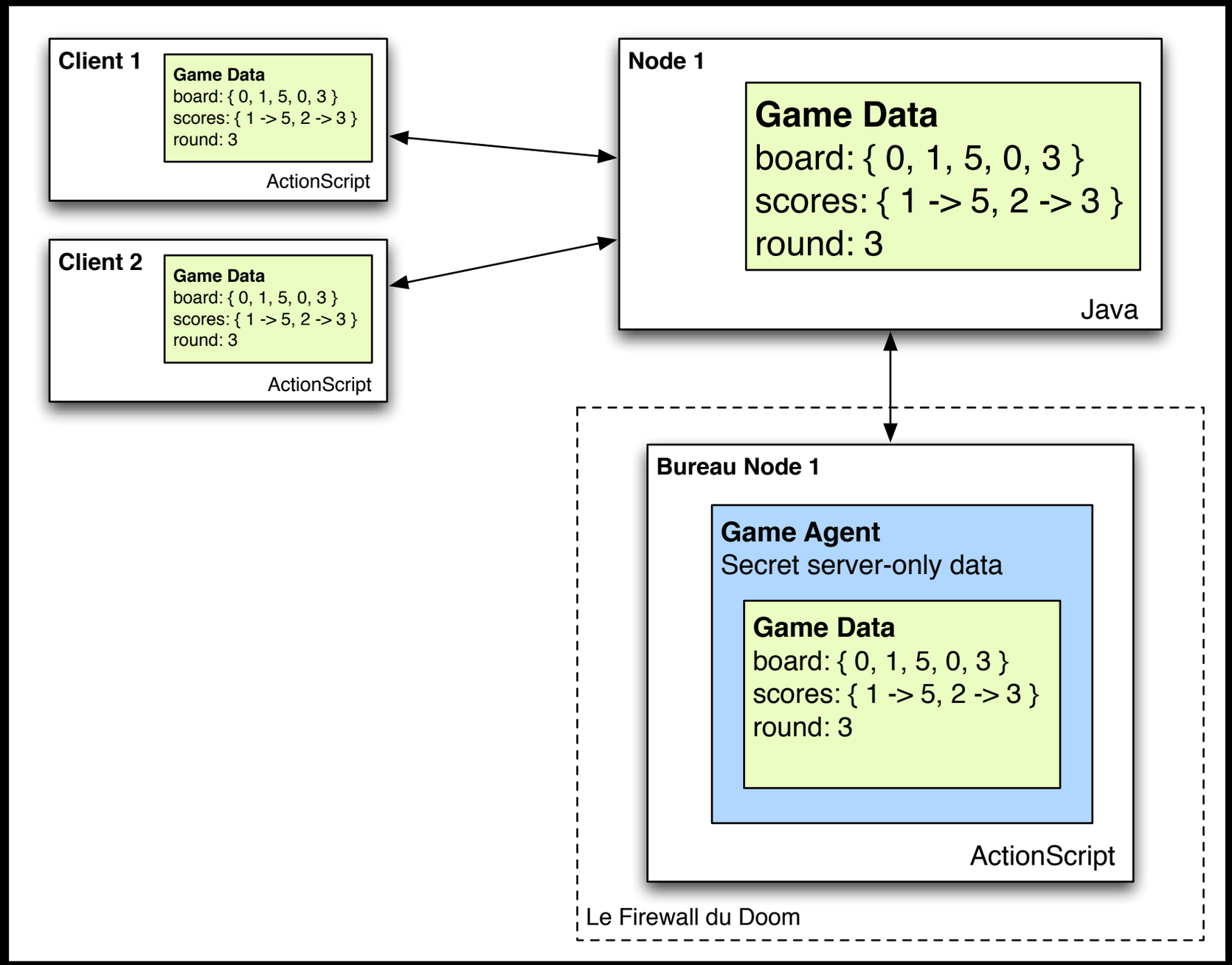
Games can use multiplayer API.



Games can use multiplayer API.

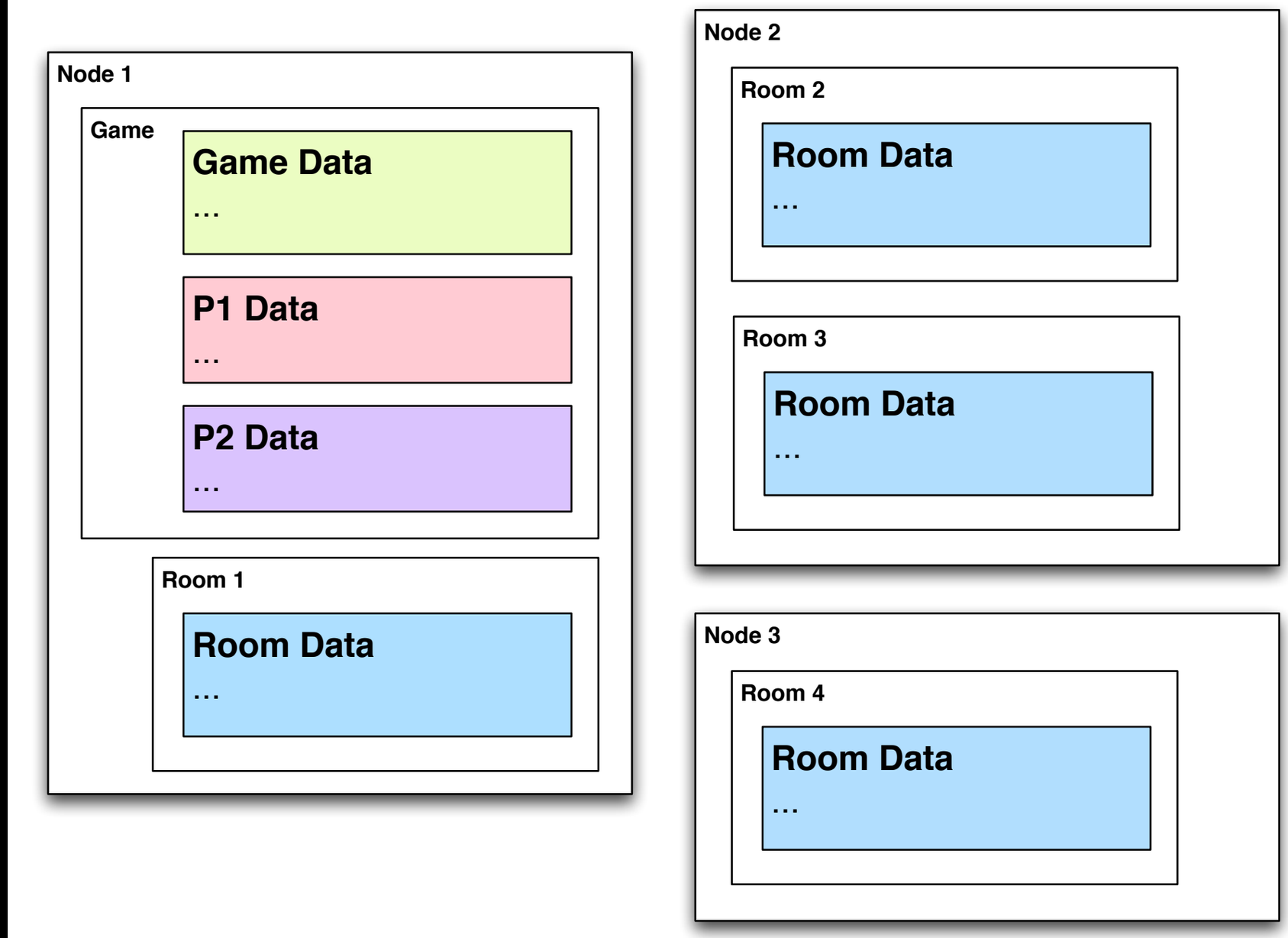


Control doesn’t work well for games
so we have server-side code.



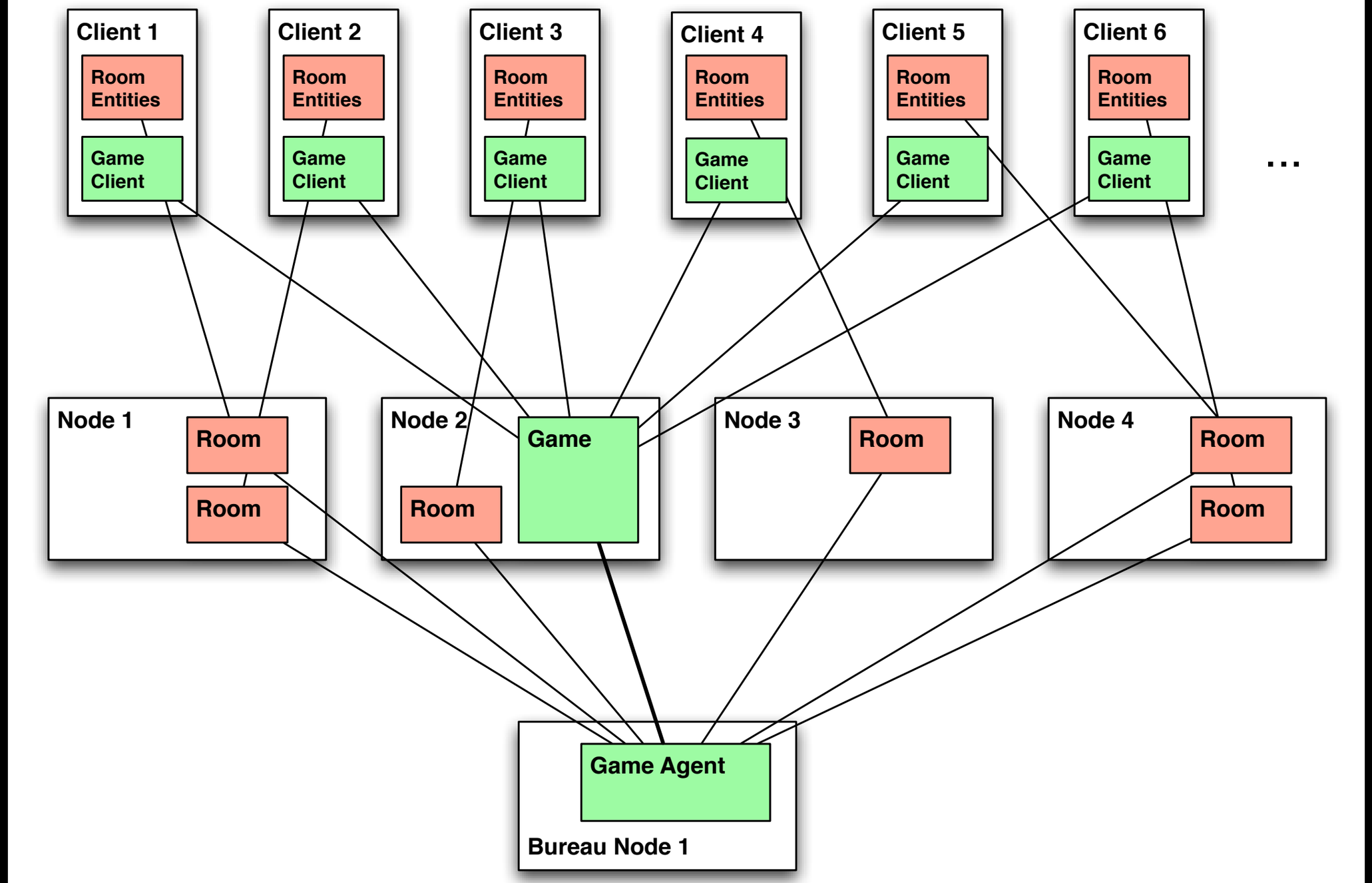
Server-side code is scary.

Whirled is AVRGs.



The AVRG API is many property spaces

and MOBs, avatar control,
effects, HUD and more.



AVRGs push the limits
of our architecture.

Any Questions?

(What? Where? When? Why? Who?)

Slides at: **http://samskivert.com/work/2009/gdc/WhirledTour.pdf**