

## **USER MANUAL FOR REALFIRE**

Date: 05-10-2014

Version: 2.3.2

### **QUICK START**

Rez the example object (small campfire). Touch to start or stop fire, touch and hold mouse button (> 1 sec.) to show menu.

### **TWO SCRIPTS: FIRE AND SMOKE**

Every prim can only have one particle emitter, so the fire and smoke scripts cannot be in the same prim. You could, for example, put the fire script in the root prim and the smoke script in a child prim. It is assumed that you have some sort of object (linkset) with at least two prims.

### **MULTIPLE FIRES USING ONE SCRIPT**

By default, the fire script will only act on the prim that contains it, but it can set fire to other prims as well. To activate this feature, set singleFire to NO in the notecard. Give the fire prim a name (other than "Object") and create more fire prims by simply giving them the same name.

Warning: multiple fires in close proximity will generate a lot of particles! Both fire and smoke have a particle count of 100, so if you intend to use a lot of them it may be a wise decision to use an animated texture instead.

Limitation: linkset only.

### **SMOKE CONTROL (SMOKE WITHOUT FIRE)**

The smoke-only feature was dropped in 2.0 and reintroduced in 2.2.1 by popular demand. Drop "smoke" and "smoke\_control" in the same prim and touch for on/off. No other scripts are needed.

### **LINK CONTROL (SECONDARY SWITCH)**

For those awkward moments when you wished you could have an additional switch, but without the fire. Now you can. Drop in any prim within the same linkset. Touch for on/off, long touch for menu.

There can be more than one secondary switch.

### **REMOTE CONTROL (EXTERNAL SWITCH)**

Remote switch that works across an entire sim. Drop the remote control script in an external object and the remote receiver script into the prim where the fire is located. Touch for on/off, long touch for menu.

If you have more than one fire, you may see multiple menus stacked on top of each other. To bind a remote to one specific fire, enter the same text in the description of both prims.

There can be more than one external switch, but be aware that every receiver has an open listener.

### **NETWORK CONTROL (CONTROL PANEL FOR MULTIPLE FIRES)**

Drop the network control script in an empty prim and the network receiver script in every prim that contains a fire script. It can control up to 9 fires, turn them on or off all at the same time, or pull up the menu for individual fires. Touch for menu.

There are two versions: linkset and region. When using the region version, every receiver has an open listener.

Known issue in linkset version: turning on one fire will trigger every smoke prim in the linkset. However, you can bind a smoke prim to one specific fire by entering the same text in the description of both prims.

### **HOW TO ADD SOUND**

If you don't want to use the provided fire sound, you can drop an uploaded PCM WAV file (16-bit, 44.1

kHz, mono, <= 10 sec.) into the prim that contains the fire script. It can have any name and will be looped by the script.

## HOW TO CHANGE THE FIRE TEXTURE

Several textures have been included as a replacement for the default particle texture. Each of them will give the fire a slightly different look. Replacing the texture is as easy as dropping it in the prim inventory and removing the old texture (if any).

## BURNING DOWN

The fire burns continuously by default. You can make it burn down by setting the notecard option `burnDown` to YES. The `burnTime` and `dieTime` options control how long the fire will burn and how long it takes to die. Light, smoke and sound will start to diminish when the fire reaches the default size (or can remain unchanged, see notecard options). If you set `loop` to YES, the fire will restart and repeat the whole process.

## COMMUNICATION WITH OTHER SCRIPTS

The fire script can both send and receive link messages.

**Sending:** create a custom menu button by entering a short text after `extButton = "` in the notecard, replacing "Close" in the menu. When the button is touched, it will send the number 10960 and the button text in a link message. The message can be caught by another script within the same linkset. The other script can call the main menu by sending the number 10959 and the word "menu".

**Receiving:** other scripts can control the fire and menu by sending the number 10959 and a command. See "CONFIGURATION NOTECARD" for all possible commands. Useful for plugins, of which two examples are included: `nightfire` and `proximity`.

**On/off messages:** whenever the fire is started or stopped, it will send the number 10961 and either 1 (TRUE) or 0 (FALSE) in a link message. The message can be caught by another script within the same linkset.

## CONFIGURATION NOTECARD

The fire script uses a notecard (default name "config"). Here you can configure verbosity, access control, if and how the fire burns down, number of fires, menu defaults, light properties and communication with other scripts. The notecard is optional. If not present, default values will be used as indicated below.

For faster loading, remove whatever lines you don't need.

```
verbose = YES           # show more/less info during startup
switchAccess = 1        # access level for switch (1 = public, 2 = group, 4 = owner, 6=2+4)
menuAccess = 1          # access level for menu (1 = public, 2 = group, 4 = owner, 6=2+4)
burnDown = NO           # YES = burn down, NO = burn continuously
loop = NO               # YES = restart after burning down
burnTime = 300          # time to burn before starting to die, in seconds
dieTime = 300           # time it takes to die, in seconds
changeLight = YES       # YES = change light with fire, NO = remain at current int./radius
changeSmoke = YES       # YES = change smoke with fire, NO = remain at 100%
changeVolume = YES      # YES = change volume with fire, NO = remain at current volume
singleFire = YES        # YES = single fire, NO = multiple fires

# Menu defaults

size = 25               # fire size percentage
topColor = < 100, 0, 0 > # top color percentage (red, green, blue)
bottomColor = < 100, 100, 0 > # bottom color percentage (red, green, blue)
volume = 100            # sound volume percentage
smoke = YES             # smoke or no smoke
sound = YES             # sound or no sound

# Light properties

intensity = 100         # light intensity percentage
radius = 50             # light radius percentage
falloff = 40            # light falloff percentage
```

```
# Link messages: in

msgNumber = 10959      # number part of incoming link messages
msgSwitch = switch     # string part of incoming link message: switch (on/off)
msgOn = on             # string part of incoming link message: switch on
msgOff = off           # string part of incoming link message: switch off
msgMenu = menu         # string part of incoming link message: show menu

# Link messages: out

extButton =            # "Close" replaced by button text (sends link message)
extNumber = 10960      # number part of outgoing link message
switchNumber = 10961   # number part of outgoing on/off messages
```

## ACCESS CONTROL

Both fire and menu have 3 access levels: owner, group and public. For example, you could have a public fire switch with limited access to the menu so no one can mess with your settings.

Access levels:

- 1 = public: anyone
- 2 = group: avatars with same active group as object
- 4 = owner: object owner
- 6 = group + owner

## SILENT STARTUP

Near the top of (almost) every script you will see the following line:

```
integer silent = FALSE; // silent startup
```

Even with verbose set to NO you will still see some whispers during startup. For a completely silent startup, set silent to TRUE.

## CHANGE HISTORY

1.0, 01-07-2011:

- initial version

1.1, 06-05-2012:

- changed license from CC BY-SA to CC BY
- added license notecard, configuraton notecard and example

2.0, 16-06-2012:

- menu: smoke on/off, sound on/off, change size, speed and color
- access control: owner, group, public
- simplified notecard settings
- plugin support

2.1, 30-04-2013

- added additonal permissions to license
- moved "verbose" setting to notecard
- menu defaults
- replaced "Speed" with "Volume" in menu
- set default light properties (intensity, radius, falloff)
- enable/disable burning down (disabled by default)
- light/smoke/sound can either change with fire or remain constant
- bugfix: sound not starting/stopping when added/removed

2.1.1, 17-05-2013

- removed author name from configuration notecard
- larger fire (up to 4 meters high)

- examples for nightfire and proximity (plugins)

## 2.2, 31-05-2013

- restart fire after burning down
- link control (secondary switch)
- remote control (external switch)
- network control (control panel for multiple fires)
- bugfix: sound status is ON even when sound is missing
- bugfix: link messages from plugins could bypass access control

### 2.2.1, 12-01-2014

Bugfixes in network control:

- added linkset version: region version is inconvenient for rentals
- removed access limitation (owner/group): inconvenient for rentals
- fixed node discovery: sometimes incomplete, depending on rez order
- fixed sorting of menu buttons

Other:

- reintroduced smoke-only feature (dropped in 2.0)
- bugfix: potential channel conflict with Lighting System

## 2.3, 02-02-2014

- multiple fires using one script
- outgoing link messages
- bugfix: potential channel conflict with Lighting System

### 2.3.1, 21-03-2014

- user-definable extension button
- bugfix: object can be touched before notecard has finished loading
- removed all debug code
- final code cleanup

### 2.3.2, 05-10-2014

- slightly improved startup messages
- more efficient notecard loading
- use alternate fire texture (4 included)
- more realistic smoke texture
- smoke is resized, not faded out