

NAME

cube21 – animates the Cube 21 puzzle

SYNOPSIS

cube21 [--display *host:display.screen*] [--visual *visual*] [--window] [--root] [--window-id *number*] [--install] [--delay *microseconds*] [--texture] [--no-texture] [--mono] [--wireframe] [--spin] [--no-spin] [--wander] [--no-wander] [--randomize] [--no-randomize] [--spinspeed *number*] [--rot-speed *number*] [--wanderspeed *number*] [--wait *number*] [--cubeseize *number*] [--colormode *arg*] [--fps]

DESCRIPTION

This program animates a puzzle known as Cube 21 or Square-1. Its moves are chosen randomly.

Cube 21 is a Rubik-like puzzle invented in 1992. Its specialities are that it can change its shape and even the number of possible moves. It can have more than 200 different shapes and the total number of configurations (assuming colors) is several tens of billions.

OPTIONS

cube21 accepts the following options:

--window

Draw on a newly-created window. This is the default.

--root

Draw on the root window.

--window-id *number*

Draw on the specified window.

--install

Install a private colormap for the window.

--visual *visual*

Specify which visual to use. Legal values are the name of a visual class, or the id number (decimal or hex) of a specific visual.

--delay *microseconds*

How long to pause between frames. Default is 20000, or 0.02 second.

--texture

Use texture maps. This is the default.

--no-texture

Use solid colors.

--mono

Disable both texture maps and colors.

--wireframe

Only draw outlines. Outlines of all pieces, not only the whole object, are drawn.

--spin

Spin the whole object around X, Y and Z axes. This is the default.

--no-spin

Do not spin, showing the same three faces all the time.

--wander

Move the object around the screen. This is the default.

--no-wander

Keep the object centered on the screen.

--randomize

Shuffle the puzzle randomly at startup. This is the default.

- no-randomize**
Do not shuffle at startup, begin at the shape of cube.
- spinspeed** *number*
The relative speed of spinning. Default is 1.0.
- rotspeed** *number*
The relative speed of the moves. Default is 3.0. Setting to ≤ 0.0 makes the object stay at one configuration.
- wanderspeed** *number*
The relative speed of wandering around the screen. Default is 1.0.
- wait** *number*
How long to stay at ending position after each move. The meaning of the argument is again relative. Default is 40.0.
- cubeseize** *number*
Size of the object. Value of 3.0 fills roughly all the screen (its height). Default is 0.7.
- colormode** *argument*
How many and which colors should the object have. The colors are put on the piece faces so that the puzzle is solvable. The inner faces are not influenced.
 - se** or **silver**
Simulate the "Silver Edition" – white and one random color.
 - 2** or **two**
Two random colors.
 - ce** or **classic**
Simulate the "Classic Edition" – white, yellow, orange, red, green and blue.
 - 6** or **six**
Six random colors.
 - 1** or **random** or **rnd**
One random color.
 - Anything else
All faces white.
- fps**
Display the current frame rate, CPU load, and polygon count.

ENVIRONMENT**DISPLAY**

to get the default host and display number.

XENVIRONMENT

to get the name of a resource file that overrides the global resources stored in the RESOURCE_MANAGER property.

XSCREENSAVER_WINDOW

The window ID to use with *--root*.

SEE ALSO

X(1), xscreensaver(1)

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