OAC Devkit

Version: 4.1

PDF Document

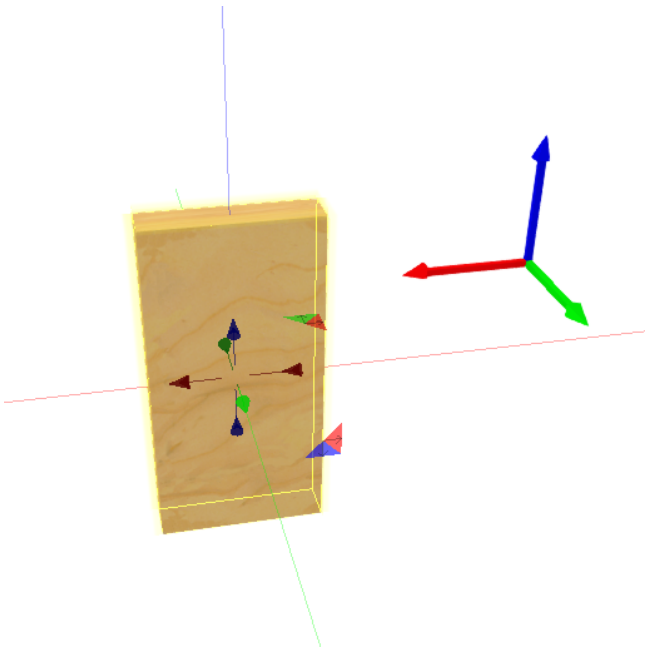
Features

- Smooth transformation, easing vision.
- Flexible configuration and combination.
- During the transformation process, the direction can be changed at any time.

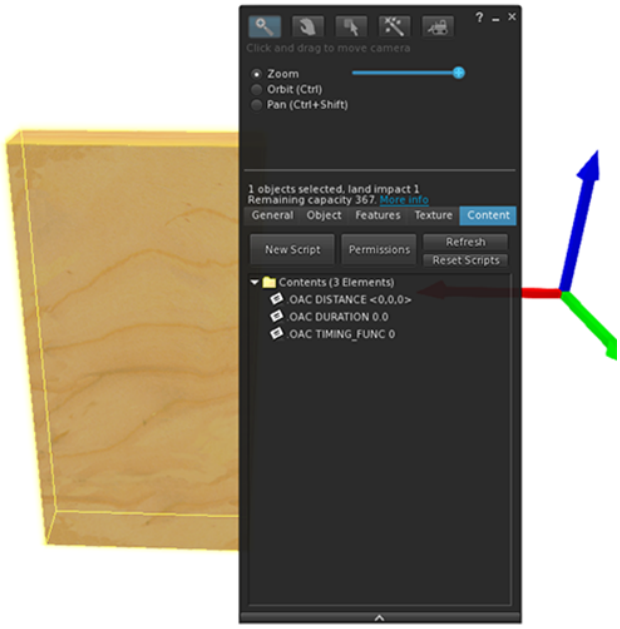
Quick Start. Follow this, step by step

1. Prepare your object.
2. According to your needs, select the configuration file which starts with ".OAC", change their parameters and drag them into the inventory.
3. Drag the main script named `OAC.KERNEL` into the inventory.
4. Select the trigger script you need, drag and drop it into the object. Some trigger scripts have been preset for you in "Extra". Of course, you can customize them according to your needs.
5. Done.

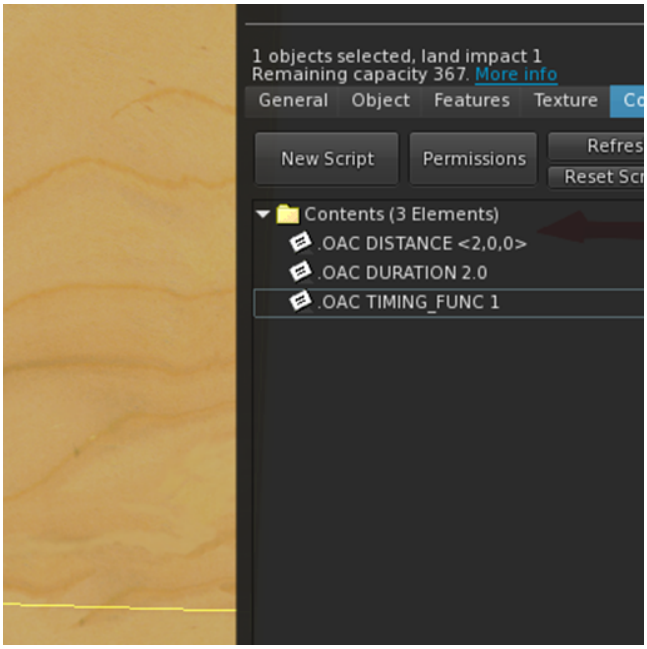
Make a single sliding door

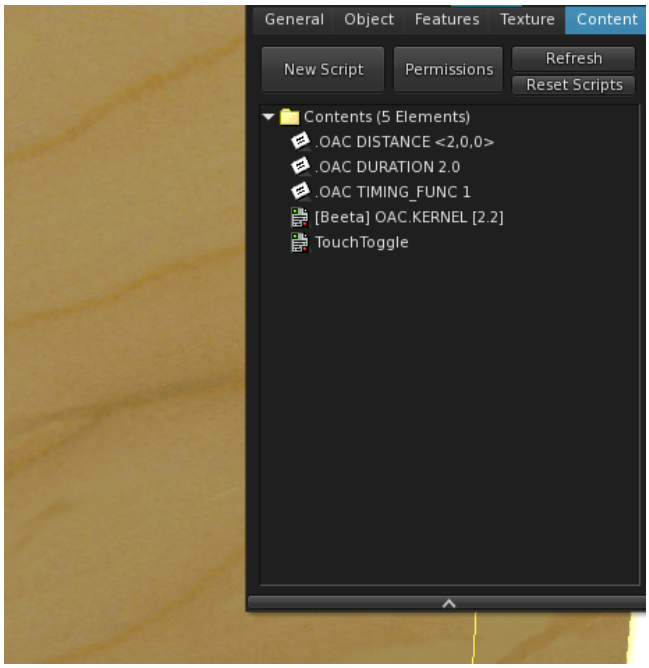


Create a box, resized like a door



Select the function you need, drag and drop them to the inventory

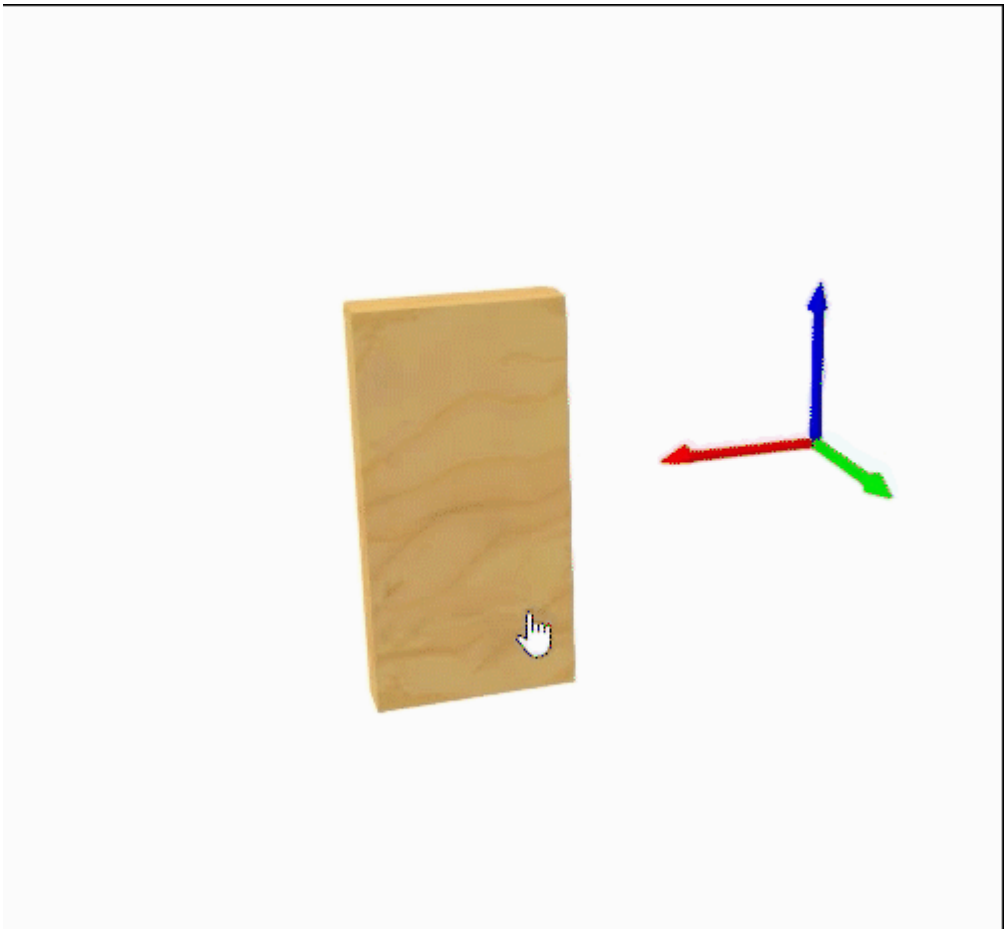




Change parameters
Move 2 meters in the X direction
The duration 2 seconds
Use the ease-in-out timing function

Drag and drop scripts

Touch to see the effect



For more detailed examples, please test and edit after rez them in "Example"

Scripts

name	description
OAC.KERNEL	**(required)** Main script

Extra

name	description
TouchToggle	Make the prim touchable, touch to trigger toggle, it will only trigger the current prim(LINK_THIS).
TouchToggleSync	Make the prim touchable, touch to trigger toggle, it will trigger all prims in the linkset(LINK_SET).
AutoClose 30s	Automatically close after 30 seconds when it is opened.
AutoToggle after end 20s	When the transformation is end, wait for 20 seconds to switch the state, looping.
AgentSensorOpen	Open when someone is nearby.
AgentSensorToggle	Open when someone is nearby, close when no one is around.
SoundTrigger	Play sound during operation. This script is preset as an electric door, which can be changed arbitrarily.

Configuration

One notecard represents one configuration field, drag notecard to inventory, edit its name.

Format: .OAC {key} {value}

key	type	value	default	description	version
BROADCAST2	integer	> -5 && != 0	-4	Broadcast sending range, -4:`LINK_THIS`, -3:`LINK_ALL_CHILDREN`, -2:`LINK_ALL_OTHERS`, -1:`LINK_SET`, 1:`LINK_ROOT`, and others	3.3
DURATION	float	Any	0.0	If less than 0.1, it is treated as 0.0, 0.0 means no transformation process	1.7
DISTANCE	vector	Any	<0.0,0.0,0.0>	Transform distance	4.0
ROTATION	vector	Any	<0.0,0.0,0.0>	Transform rotation, The meaning of this vector is <ROLL, PITCH, YAW>. * The rotation is always relative to the prim's local directional vector.	1.8

key	type	value	default	description	version
SCALE	vector	Greater than <0.0,0.0,0.0>	<1.0,1.0,1.0>	Scale, scale change, no negative value, if equal to ZERO_VECTOR (<0.0,0.0,0.0>), it is considered invalid	3.0
ORIGIN	integer	0/1/2	0	see special note below	2.0
TIMING_FUNC	integer	0/1/2/3	0	see special note below	2.0
QUEUE	string			Queue mode, see below	3.0

DISTANCE special usage

After version 4.0, the value of DISTANCE adds an option relative to the object size, supporting the suffix x, y, z, X, Y, Z.

- x, y, z: the size of this prim
- X, Y, Z: size of root prim

```
DISTANCE <1.2x,2X,0.5z> //Move 1.2 times the current prim size x in the x direction, 2 times the root prim size x in the y direction, and 0.5 times the current prim size z in the z direction.
```

examples

1. There is a sliding door with width x, height z, and thickness y. Opening the door requires moving 0.8 times the width of the door along the x-axis, as written below:

```
DISTANCE <0.8x,0,0>
```

2. For a scalable slider, we cannot determine its size, so we cannot determine the specific distance it moves. We only know that it will rise along the z-axis by a height 2 times the root prim size y. It is written as follows:

```
DISTANCE <0,0,2Y>
```

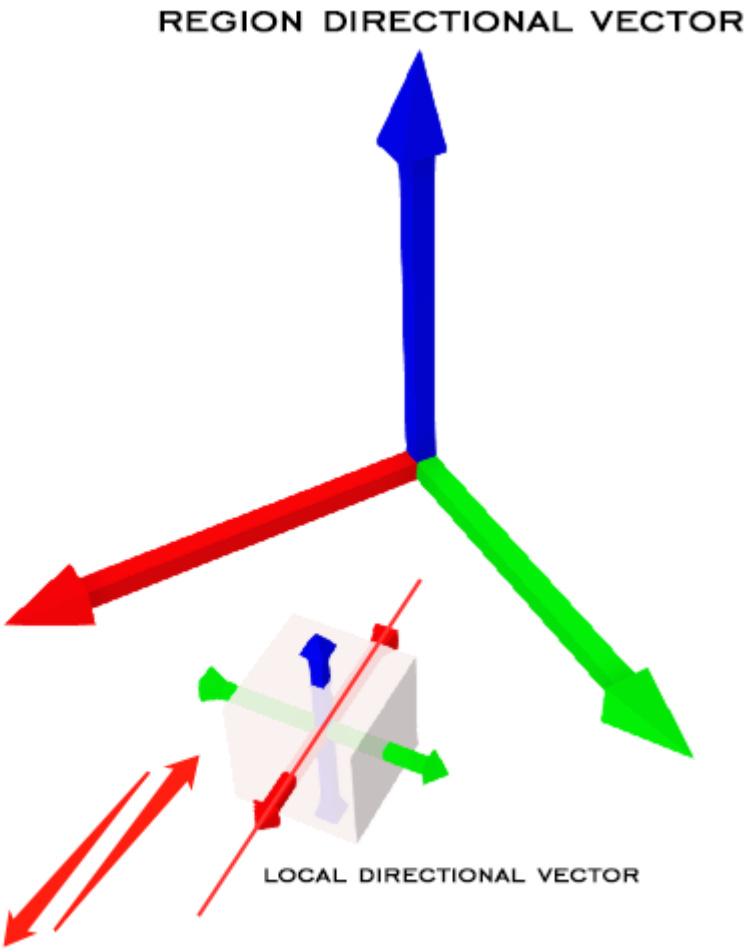
About ORIGIN

local (0)

The transformation will refer to the local directional vector.

Example:

```
.OAC DISTANCE <1.0, 0.0, 0.0>
.OAC ORIGIN 0
```

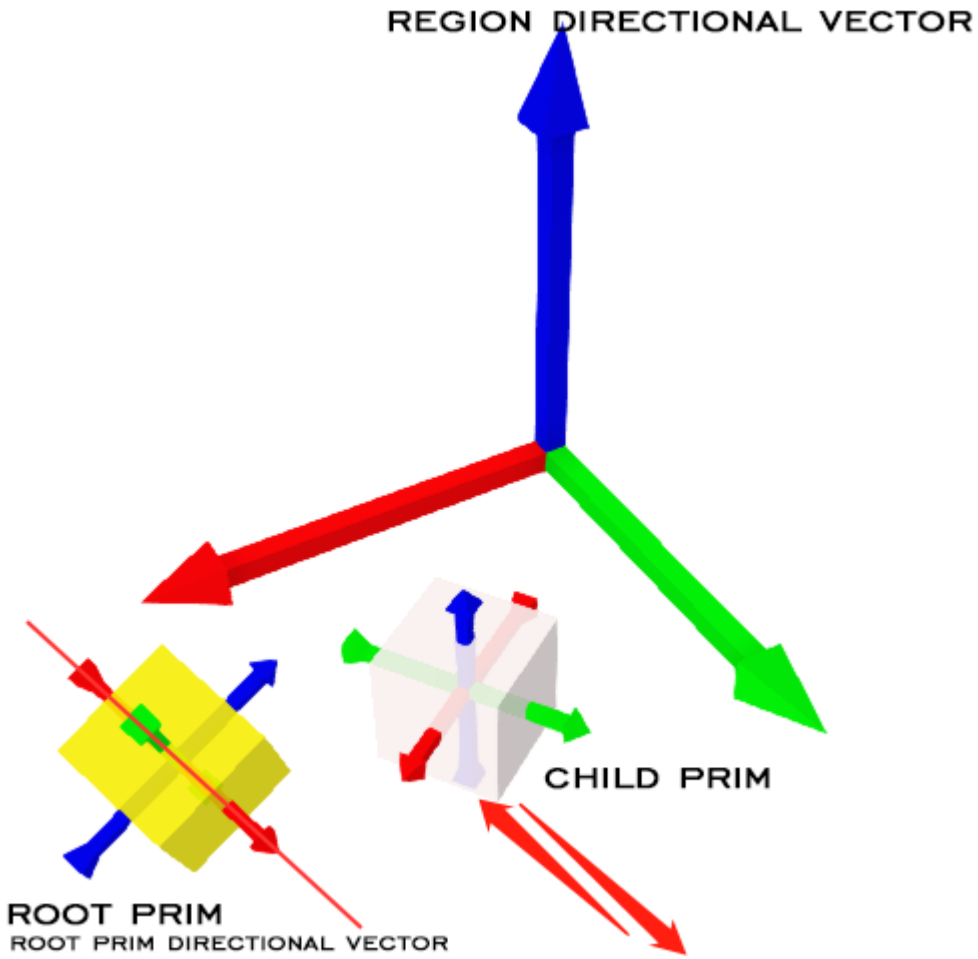


root (1)

The transformation will refer to the root prim directional vector.

Example:

```
.OAC DISTANCE <1.0, 0.0, 0.0>
.OAC ORIGIN 1
```



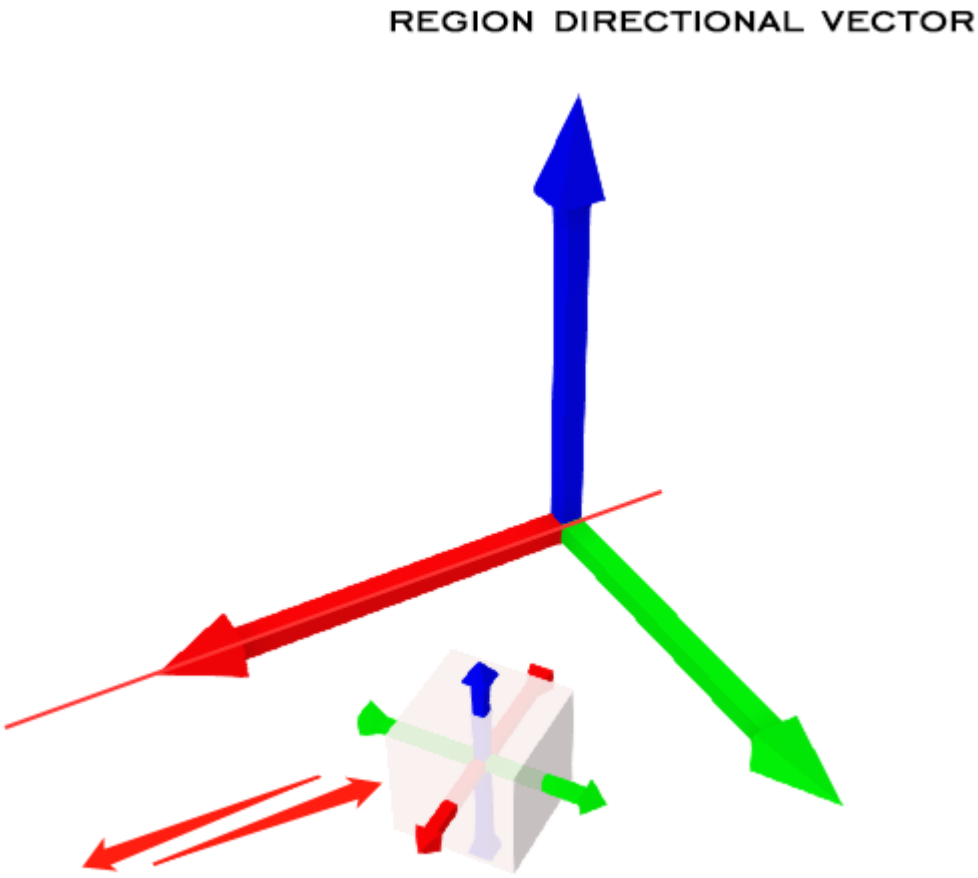
It only works for child prims in linkset. When the object is the root prim or it is a standalone prim, **root=region**

region (2)

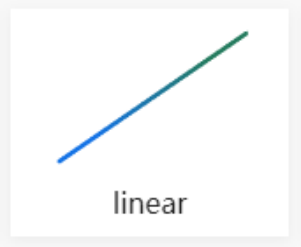
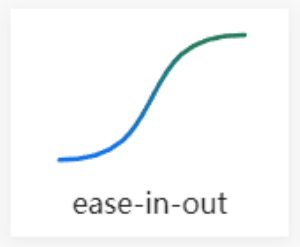
The transformation will refer to the region directional vector.

Example:

```
.OAC DISTANCE <1.0, 0.0, 0.0>
.OAC ORIGIN 2
```



About TIMING_FUNC

0: linear	1: ease-in-out	2: ease-in	3: ease-out
			
`.OAC TIMING_FUNC 0`	`.OAC TIMING_FUNC 1`	`.OAC TIMING_FUNC 2`	`.OAC TIMING_FUNC 3`

since 3.2

Two special values, forward movement and negative movement are symmetrical.

For example, if the forward direction is ease-in, then the reverse direction will automatically switch to ease-out.

102: ease-in (ease-out when reversed)	103: ease-out (ease-in when reversed)
`.OAC TIMING_FUNC 102`	`.OAC TIMING_FUNC 103`

Queue Mode

The Queue mode is added in version 3.0, which can continuously perform multiple change processes (forward and reverse), and continues the feature of switching directions at any point in time.

```
.OAC QUEUE
{Number}/{DURATION}/{ORIGIN}/{TIMING_FUNC}/{DISTANCE}/{ROTATION}/{SCALE}
```

Yes, it writes the previously supported parameters in one line and assigns them to QUEUE, and then you can add multiple QUEUEs.

{Number} represents the order of QUEUE. In the content of PRIM, files are arranged in ascending order of file names, so as long as the sequence is correct, the number can be specified freely, whether it is 1234... or ABCD....

If you need to wait between two QUEUEs, you can join a QUEUE with only a duration, like this:

```
.OAC QUEUE 1/5.0///<10.0,0.0,0.0>//
.OAC QUEUE 2/2.0/////
.OAC QUEUE 3/5.0///<0.0,10.0,0.0>//
```

Linkset message

Link Message to Send

Num: **802840**

Open

positive movement

```
llMessageLinked(..., 802840, "OPEN", "");
```

Close

reverse movement

```
llMessageLinked(..., 802840, "CLOSE", "");
```

Toggle

Switch the current direction of movement

```
llMessageLinked(..., 802840, "TOGGLE", "");
```

Set Direction

Manually submit and change the current running direction status

value: Greater than 0: Set to opened (to be closed) state, and can be closed at this time (reverse transformation) Less than or equal to 0: Set to closed (to be opened) state, and can be opened at this time (forward transformation)

```
llMessageLinked(..., 802840, "DIRECTION|1", "");
llMessageLinked(..., 802840, "DIRECTION|-1", "");
```

Reload

Manual reset script. (Reload all parameter from Notecard)

```
llMessageLinked(..., 802840, "RELOAD", "");
```

Submit global scale

Acting on DISTANCE, the moving distance magnification of the sub-PRIM in the zoomed state.

Default: 1.0，If the given value <0, the default value is used.

```
llMessageLinked(..., 802840, "SCALE|1.0", "");
```

Link Message to Receive

Num: **802841**

Transform started

To: `BROADCAST2` specified, default is -4:`LINK_THIS`

```
TRANSFORM_STARTED|{direction}
```

direction:

- 1: open, positive movement
- -1: close, reverse movement

Transform finished

To: BROADCAST2 specified, default is -4:LINK_THIS

```
TRANSFORM_FINISHED|{direction}
```

direction:

- 1: open, positive movement
- -1: close, reverse movement

Transform processing (Queue mode)

To: BROADCAST2 specified, default is -4:LINK_THIS

```
TRANSFORM_PROCESS|{direction}|{queue index}|{effective}
```

direction:

- 1: open, positive movement
- -1: close, reverse movement

effective:

- 0: if no change in DISTANCE, ROTATION, SCALE
- 1: If any of DISTANCE, ROTATION, SCALE changes

LinksetData Trigger

OAC.KERNEL will listen for LINKSETDATA_UPDATE

name: (string)llGetLinkKey(LINK_ROOT) + "-oac-stat"

- Triggers **CLOSE** when value is an **even number** (**0 [2 4 6...]**)
- Triggers **OPEN** when value is an **odd number** (**1 [3 5 7...]**)

```
llLinksetDataWrite((string)llGetLinkKey(LINK_ROOT) + "-oac-stat", "1"); // OPEN
llLinksetDataWrite((string)llGetLinkKey(LINK_ROOT) + "-oac-stat", "0"); // CLOSE

llLinksetDataWrite((string)llGetLinkKey(LINK_ROOT) + "-oac-stat", "2"); // CLOSE
llLinksetDataWrite((string)llGetLinkKey(LINK_ROOT) + "-oac-stat", "3"); // OPEN
```