# Slinkware

# Minted Jesse Johnson Long Nose Industries, LLC <a href="https://cloudcheats.net">https://cloudcheats.net</a>

 $\mathrm{May}\ 25,\ 2021$ 

# Contents

1	$\mathbf{Pro}$	ogue	2
2	Ove	view of The Graphical User Interface	3
3	Con 3.1 3.2	iguration  Jitter configuration	<b>4</b> 4
4	Per	ormance Analysis of The Dachshund Engine, Iteration Two	5
	4.1	Accounting for False Positives	5
		4.1.1 Trojan	5
		4.1.2 Spark	5
		4.1.3 Karhu	5
		4.1.4 Paladin	5
	4.2	The Cloud Algorithm	6
		4.2.1 Trojan	6
		4.2.2 Spark	6
		4.2.3 Karhu	6
		4.2.4 Paladin	6
	4.3	The Slinkware Algorithm	7
5	Cus	omer Support	8

## 1 Prologue

Shortly after the initial release of the first public version of Slinky (specifically version 4.1), our developers were approached by the CloudCheats<sup>1</sup> team. One month later, we are proud to announce our new product, titled *Slinkware*. This new auto-clicker software is the successor of our *Slinky* product, with various new improvements. When the CloudCheats team contacted us, they were looking for ways to improve their randomization algorithm. They provided us with a dataset of click data, generated using their product Cloud Clicker. Our data analyst visualised their dataset to compare it to legimimate data, in an effort to find any flaws.

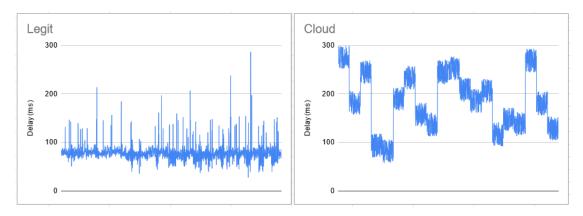


Figure 1: Visualisation of legitimate click data (left) compared to Cloud's artificial click data (right).

The line charts above show a clear distinction between the two datasets. Our team decided it was a good idea to also perform the same analysis using a dataset generated using the second iteration of our proprietary *Dachshund Click Engine*, with the following results:

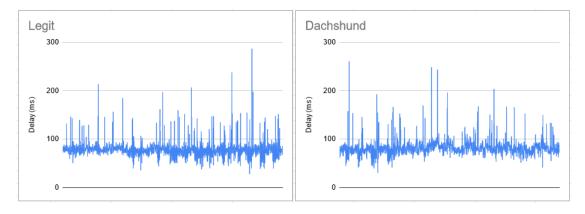


Figure 2: Visualisation of legitimate click data (left) compared to Dachshund's artificial click data (right).

It appears that our engine does not suffer from the same issue, so we decided to also use it in *Slinkware*. While we decided to not use Cloud Clicker's inferior code base, we were still interested in a collaboration, so we let their team take care of the graphical user interface design and customer support. An overview of the graphical user interface can be seen on the next page. For additional questions, do not hesitate to contact support at <a href="https://cloudcheats.net">https://cloudcheats.net</a> (ask for 'Jesse' for high-priority support).

<sup>1</sup>https://cloudcheats.net

# 2 Overview of The Graphical User Interface

We would like to thank the CloudCheats team for designing our new graphical user interface, which is shown in the picture above. The user interface does not actually offer any functionality. Instead, the clicker is configured using the included configuration file. For more details on how to configure our product, read the next section or contact support at <a href="https://cloudcheats.net">https://cloudcheats.net</a> (ask for 'Jesse' for high-priority support).

# 3 Configuration

Unlike our previous product *Slinky*, configuration is no longer done through the graphical user interface. Instead, *Slinkware* utilizes an advanced configuration file allowing for very fine adjustments. Slinky will search for a file with the name *Slinkware.toml* in the same directory as the executable and use that as its configuration file.

### 3.1 Jitter configuration

The default configuration will resemble 'jittering', which refers to a clicking technique where the user vibrates their finger at high speed, resulting in between 10 to 14 clicks per second on average.

### 3.2 Butterfly configuration

Our media expert pointed out that the alternative 'butterfly clicking' technique is also gaining popularity quickly within the Minecraft PvP community, so we have added support for that as well. In case you are not familiar with the term, butterfly clicking refers to tapping the mouse button with two fingers, usually the index- and middle fingers, with high force. This makes the mouse button bounce up and down more than once on most mice, resulting in additional clicks. This clicking technique is excellent for achieving very high click speeds, usually up to around 20 clicks per second. If you are interested in using this alternative configuration, you can replace the *Slinkware.toml* file with the included *Butterfly.toml* file (make sure that the new configuration is still called *Slinkware.toml*). If you are unable to get this to work, feel free to contact support at https://cloudcheats.net (ask for 'Jesse' for high-priority support).

# 4 Performance Analysis of The Dachshund Engine, Iteration Two

Slinkware uses an improved version of the original Dachshund Engine as its base, to guarantee undetectability. It has been modified to grant full customization to its users, allowing them to fine-tune the product to their likings. Additionally, we hired 43 Minecraft players to generate click data to train our Neural Network, resulting in extremely close resemblance with real human clicks. To test its effectiveness, we decided to test both the current Cloud Clicker algorithm and the new algorithm used in Slinkware against various anti-cheats that are used on Minecraft servers. Our contacts were so kind to provide us with screenshots of the anti-cheat alerts generated using both algorithms.

#### 4.1 Accounting for False Positives

In order to ensure that our results are reliable, we decided to also test the anti-cheats when clicking legitimately. Here are the results:

#### 4.1.1 Trojan

We were unable to generate any false positives on this anti-cheat.

#### 4.1.2 Spark

We were unable to generate any false positives on this anti-cheat.

#### 4.1.3 Karhu

We were unable to generate any false positives on this anti-cheat.

#### 4.1.4 Paladin

```
Paladin > Rowin flagged flutoClicker W x53
Paladin > Rowin flagged flutoClicker Z x1
Paladin > Rowin flagged flutoClicker Y x1
Paladin > Rowin flagged flutoClicker T x38
Paladin > Rowin flagged flutoClicker T x39
Paladin > Rowin flagged flutoClicker X x2
Paladin > Rowin flagged flutoClicker T x40
Paladin > Rowin flagged flutoClicker W x54
Paladin > Rowin flagged flutoClicker T x41
```

One of our testers was able to generate various false positives on this anti-cheat by clicking a consistent 9 to 10 clicks per second for an extended period of time.

### 4.2 The Cloud Algorithm

Here are the results from our testers using Cloud Clicker against the same anti-cheats as before.

#### **4.2.1** Trojan



Our testers informed us that Trojan is capable of flagging any configuration they attempted to use within 5 minutes, with an average auto-ban time of 16.3 minutes.

### **4.2.2** Spark

```
(2) vaperion failed AutoClicker CSU. VL: 1,0. Ping: 127 ms, TPS: 20,0. Client: Vanilla. C21 vaperion failed AutoClicker LKT. VL: 4,0. Ping: 127 ms, TPS: 20,0. Client: Vanilla. C31 vaperion failed AutoClicker LOL. VL: 2,0. Ping: 127 ms, TPS: 20,0. Client: Vanilla. C31 vaperion failed AutoClicker HCPS, VL: 0,0. Ping: 127 ms, TPS: 20,0. Client: Vanilla. C31 vaperion failed AutoClicker HCPS, VL: 0,0. Ping: 127 ms, TPS: 20,0. Client: Vanilla.
```

Spark appears to flag Cloud Clicker as well, our testers were not able to last longer than 30 minutes when playing uninterrupted.

#### 4.2.3 Karhu



Our testers did not manage to bypass Karhu when clicking above 6 clicks per second.

#### 4.2.4 Paladin



While our testers did not manage to generate any alerts for the auto-clicker checks, clicking above 15 clicks per second on any entity appears to generate alerts for the speed and velocity checks.

### 4.3 The Slinkware Algorithm

This section is very short, due to no anti-cheat being able to detect our algorithm. One of our insiders at Minemen Club was able to provide us with the following screenshot as well:

```
Fetching ...
AGC lookup for tye3315 from all time:
No violations found
Was banned for:
Manual Ban (by LeftBooob)
```

Unfortunately we were not able to test their anti-cheat in our previous tests.

# 5 Customer Support

CloudCheats is offering 24/7 customer support, thanks to their staff team which is located in countries all around the globe, such as Venezuela, Ireland, Republic of Congo and Afghanistan. If you have any questions, feel free to contact support at https://cloudcheats.net (ask for 'Jesse' for high-priority support).