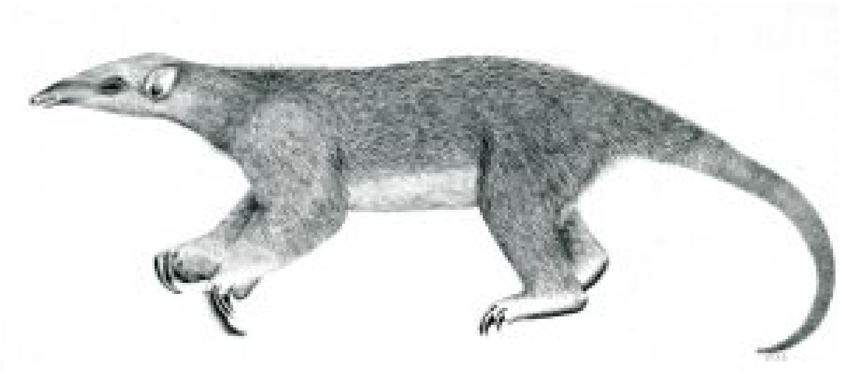
# Tranalyzer2

## rustExample

T2 Rust plugin example



Tranalyzer Development Team

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# 1 rustExample

## 1.1 Description

This plugin is an example on how to use the t2plugin crate to create a Tranalyzer2 plugin in Rust.

t2plugin **crate source:** https://github.com/Tranalyzer/t2plugin

t2plugin **crate documentation:** https://tranalyzer.com/rustdoc/t2plugin/

This plugin performs the following three tasks for each flow:

1. Compute the on-wire throughput (from layer 2). This demonstrates how to output a simple column and how to access the Packet and Flow structures.
2. Extract the PHPSESSID cookies from HTTP. This demonstrates how to output a compound column and how to parse text protocols.
3. Extract the Server Name Indication (SNI) from TLS handshakes. This demonstrates how to parse binary protocols.

## 1.2 Flow File Output

The rustExample plugin outputs the following columns:

| Column | Type | Description |
|---|---|---|
| l2Throughput | D | On-wire throughput in [bytes/s], computed from layer 2. |
| phpSessIds | R:U8_S | Repetitive compound: phpSessId. |
| tlsSni | S | TLS handshake Server Name Indication (SNI) extension. |

### 1.2.1 phpSessId

Each compound value in the phpSessIds column is to be interpreted as follows:

| 1st sub-value | Description |
|---|---|
| **0** | Cookie sent by the client in a Cookie header |
| **1** | Cookie sent by the server in a Set-Cookie header. |

The 2nd sub-value contains the value of the PHPSESSID cookie.