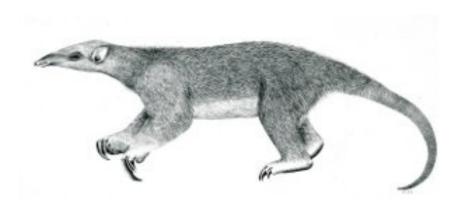
# Tranalyzer2

psqlSink



PostgreSQL



Tranalyzer Development Team

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### 1 psqlSink

#### 1.1 Description

The psqlSink plugin outputs flow files to PostgreSQL database.

#### 1.2 Dependencies

#### 1.2.1 External Libraries

This plugin depends on the libpq library.

Ubuntu: sudo apt-get install libpq-dev

Arch: sudo pacman -S postgresql-libs

Mac OS X: brew install postgresql

#### 1.3 Configuration Flags

The following flags can be used to control the output of the plugin:

| Name                    | Default      | Description                             |
|-------------------------|--------------|---|
| PSQL_OVERWRITE_DB       | 2            | 0: abort if DB already exists           |
|                         |              | 1: overwrite DB if it already exists    |
|                         |              | 2: reuse DB if it already exists        |
| PSQL_OVERWRITE_TABLE    | 2            | 0: abort if table already exists        |
|                         |              | 1: overwrite table if it already exists |
|                         |              | 2: append to table if it already exists |
| PSQL_TRANSACTION_NFLOWS | 40000        | 0: one transaction                      |
|                         |              | > 0: one transaction every $n$ flows    |
| PSQL_QRY_LEN            | 32768        | Max length for query                    |
| PSQL_HOST               | "127.0.0.1"  | Address of the database                 |
| PSQL_PORT               | 5432         | Port of the database                    |
| PSQL_USER               | "postgres"   | Username to connect to DB               |
| PSQL_PASS               | "postgres"   | Password to connect to DB               |
| PSQL_DBNAME             | "tranalyzer" | Name of the database                    |
| PSQL_TABLE_NAME         | "flow"       | Name of the table                       |

#### 1.4 Post-Processing

The following queries can be used to analyze bitfields in PostgreSQL:

• Select all A flows:

```
SELECT to_hex("flowStat"::bigint), *
FROM flow
WHERE ("flowStat"::bigint & 1) = 0::bigint
```

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```
    Select all IPv4 flows:
        SELECT *
        FROM flow
        WHERE ("flowStat"::bigint & x'4000'::bigint) != 0::bigint
    Select all IPv6 flows:
        SELECT to_hex("flowStat"::bigint), *
        FROM flow
        WHERE ("flowStat"::bigint & x'8000'::bigint) != 0::bigint
```