Query Log All Filter

Overview

The QLA filter is a filter module for MaxScale that is able to log all query content on a per client session basis. Logs are written to an csv format file that lists the time submitted and the SQL statement text.

Configuration

The configuration block for the QLA filter requires the minimal filter options in it's section within the MaxScale.cnf file, stored in $MAXSCALE_HOME/etc/MaxScale.cnf.

```
[MyLogFilter]
type=filter
module=qlafilter
```

Filter Options

The QLA filter accepts one option value, this is the name that is used for the log files that are written. The file that is created appends the session number to the name given in the options entry. E.g.

```
options=/tmp/QueryLog
```
would create log files /tmp/QueryLog.1 etc.

Note, this is included for backward compatibility with the version of the QLA filter that was provided in the initial filters implementation preview in 0.7 of MaxScale. The filebase parameter can now be used and will take precedence over the filter option.

Filter Parameters

The QLA filter accepts a number of optional parameters, these were introduced in the 1.0 release of MaxScale.

Filebase

The basename of the output file created for each session. A session index is added to the filename for each file written.

```
filebase=/tmp/SqlQueryLog
```

The filebase may also be set as the filter, the mechanism to set the filebase via the filter option is superseded by the parameter. If both are set the parameter setting will be used and the filter option ignored.

Match

An optional parameter that can be used to limit the queries that will be logged by the QLA filter. The parameter value is a regular expression that is used to match against the SQL text. Only SQL statements that matches the text passed as the value of this parameter will be logged.

```
match=select.*from.*customer.*where
```

All regular expressions are evaluated with the option to ignore the case of the text, therefore a match option of select will match both `select`, `SELECT` and any form of the word with upper or lowercase characters.

Exclude

An optional parameter that can be used to limit the queries that will be logged by the QLA filter. The parameter value is a regular expression that is used to match against the SQL text. SQL statements that match the text passed as the value of this parameter will be excluded from the log output.

```
exclude=where
```

All regular expressions are evaluated with the option to ignore the case of the text, therefore an exclude option of select will exclude statements that contain both `select`, `SELECT` or any form of the word with upper or lowercase characters.

Source

The optional source parameter defines an address that is used to match against the address from which the client connection to MaxScale originates. Only sessions that originate from this address will be logged.

```
source=127.0.0.1
```

User

The optional user parameter defines a user name that is used to match against the user from which the client connection to MaxScale originates. Only sessions that are connected using this username are logged.

```
user=john
```

Examples

Example 1 - Query without primary key

Imagine you have observed an issue with a particular table and you want to determine if there are queries that are accessing that table but not using the primary key of the table. Let's assume the table name is PRODUCTS and the primary key is called PRODUCT_ID.

Add a filter with the following definition;

```
[ProductsSelectLogger]
type=filter
module=qlafilter
match=SELECT.*from.*PRODUCTS .*
exclude=WHERE.*PRODUCT_ID.*
filebase=/var/logs/qla/SelectProducts
```

The result of then putting this filter into the service used by the application would e a log file of all select queries that mentioned the table but did not mentioned the PRODUCT_ID primary key in the predicates for the query.