

# HowToDebug

Here are some simple steps in debugging your [SpamAssassin](#) installation:

- Run '**spamassassin --lint**', especially if you just added anything to your \*.cf files or a user\_prefs file. Often times you might have something slightly wrong and either a) [SpamAssassin](#) stops parsing the file or b) it's just plain wrong and causing the error.
- Run with '**-D**'. The debug output from spamassassin, sa-learn, spamd is sometimes very verbose, but it also gives you a large amount of data that can be very helpful. Often times debug is the only place to see what exactly is causing your error. When running *spamd* with *-D* you will see some initial startup activity, you can ignore this, it is just scanning a test message to help do the initial load of the perl modules.
- Sometimes its necessary to output the [SpamAssassin](#) debug information to a file. This can be done by redirecting stdout to a file and then redirecting stderr to the same location. Run '**spamassassin -D --lint > test.log 2>&1**'.
- Speed issues: \* spamassassin -D --lint 2>&1 | less\* and look for any gaps in time
- Failures: \* spamassassin -D --lint 2>&1 | grep failed\*
- DNS related: \* spamassassin -D --lint 2>&1 | grep dns:\*
- Shortcircuit: \* spamassassin -D --lint 2>&1 | grep shortcircuit:\*
- Bayes: \* spamassassin -D --lint 2>&1 | grep bayes:\*
  - If you are not seeing any BAYES rules hit in your logs/headers, make sure you have at least 200 ham and 200 spam tokens: \* sa-learn --dump magic\*

```
0.000      0      3      0 non-token data: bayes db version
0.000      0 2944470      0 non-token data: nspam
0.000      0 12169738      0 non-token data: nham
```