

# RuleLifeCycle

## Rule Life Cycle

The life-cycle of a rule goes like this.

- A rule starts off in a developer's sandbox as an experimental rule, one that he doesn't want to publish just yet.
- Alternatively, it may be a non-experimental, but still in-sandbox, testing rule. These need to be marked by the developer with "tflags publish".
- The developer may decide to switch the rule back and forth between those two states.
- Non-experimental rules' promotability is measured (see [SaUpdateBackend](#)).
- If it's good enough, it's published to the "active set".
- A good rule may be manually copied from the sandbox to the "rules" directory.
- Eventually, it stops being good enough, through the normal attrition process for antispam rules, and it stops meeting the promotion criteria.

## List Of Rule States

*Rules in sandbox:*

- **experimental** – don't promote me. "T\_" prefix in the rulesrc source file, "tflags nopublish", or the absence of a "tflags publish", implies this. These rules are compiled, by the "build/mkrules" compiler at "make" time, to "rules/70\_sandbox.cf".
- **s\_poor** – promotable, listed with "tflags publish", but not meeting promotion criteria. Compiled to "rules/70\_sandbox.cf". "T\_" is prefixed to the rule name.
- **s\_good** – promotable, listed with "tflags publish", and meeting criteria. Rules in this state are copied into the "active set". Compiled to "rules/72\_active.cf".

*Rules in the engine tarball:*

- **core** – no promotion criteria are needed; this is part of the core ruleset. Often tied closely to the distributed Mail::SpamAssassin perl modules. These are not compiled at all by "build/mkrules", and are always distributed. (new as of bug 5123.)

*Deleted rules:*

- **gone** – rule has been deleted. If a rule scores badly in core for "an extended period of time", it goes here. (Right now, this has to be done manually.)

(History: [mailing list message](#), bug 5123)

## State Transitions

The permitted transitions for those rule states, therefore, are as follows:

- **experimental** <--> **s\_poor**
- **experimental** <--> **s\_good**
- (hand copy) **s\_good** <--> **core**
- (hand copy) **core** <--> **gone**

## List Of Build States

Some rules are only used from certain build states. Here are the list of states that [SpamAssassin](#) goes through, or that rules are packaged as, during various parts of its build process.

- **builddir**: `./spamassassin`, or similar, run from inside build dir
- **make\_test**: `"make test"`
- **mass\_check**: [MassCheck](#) run from inside "masses" dir
- **bbtest**: the testing buildbot
- **bbmass**: the bbmass buildbot
- **nightly**: the [NightlyMassCheck](#)
- **make\_install**: what's installed via `"make install"`
- **tarball**: what's put in distributed tarballs (by `make dist`, `make disttest`)
- **sa\_update**: what's delivered via `sa-update`

## Build States vs. Rule States Matrix

And here's the table listing what rules are usable, where. 👍 indicates that a rule in that state is indeed usable from the listed build state.

|            | experimental | s_poor | s_good | core |
|------------|--------------|--------|--------|------|
| builddir   | 👍            | 👍      | 👍      | 👍    |
| make_test  | 👍            | 👍      | 👍      | 👍    |
| mass_check | 👍            | 👍      | 👍      | 👍    |

|              |   |   |   |   |
|--------------|---|---|---|---|
| bbtest       |  |  |  |  |
| bbmass       |  |  |  |  |
| nightly      |  |  |  |  |
| make_install |   |   |  |  |
| tarball      |   |   |  |  |
| sa_update    |   |   |  |  |