

...:lib::Smokeping::matchers::ExpLoss(3)

SmokePing

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**NAME**

Smokeping::matchers::ExpLoss – exponential weighting matcher for packet loss with RMON-like thresholds

**DESCRIPTION**

Match against exponential weighted average of last samples, thus new values are more valuable as old ones. Two thresholds – rising and falling – produce hysteresis loop like in RMON alert subsystem. If the average reaches the “rising” threshold, matcher go to the “match” state and hold it until the average drops under the “falling” threshold.

Call the matcher with the following sequence:

```
type = matcher
pattern = CheckLoss(hist => <hist>, rising=><rising> \
                    [,falling => <falling>] [,skip=><stat>] [,fast=><fast>])
```

Arguments:

- hist – number of samples to weight against; weight will be disposed with exponential decreasing manner from newest to oldest, so that the oldest sample would have 1% significance;
- rising – rising threshold for packet loss, 0–100%
- falling – falling threshold for packet loss, default is <rising>
- skip – skip <skip> number of samples after startup before “fire” alerts.
- fast – use <fast> samples for fast transition: if the values of last <fast> samples more then <rising> – take “match” state, if less then <falling> – take “no match” state.

Note:

If the actual history is less then <hist> value then this value is taken as the actual history.

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