Alerting Husbandry Julien Goodwin jgoodwin@studio442.com.au - @laptop006

Bad Alerts

Obsolete Alerts

- \$THING is down!
 - Because we turned it down a year ago
- \$THING has bug \$FOO!

• Really? The vendor fixed it three years ago and we upgraded.

Unactionable Alerts

- \$THING is down!
 - But it's managed by another woken up.

• But it's managed by another team, just thought you'd like to be

- \$SERVICE has failed SLA
 - So can I do anything about it?
 - Log for later reporting instead

SLA Alerts

Bad Thresholds

- \$SERVER has a high load average of 4
 - It has 32 cores, that's no load
- \$LUN is nearly full, only 100MB left
 - It's a 10T LUN, I have no time to respond
 - It's a 200MB LUN as /boot & a new kernel was installed

Hair trigger alerts

- \$THING didn't respond in 50ms
 - Once
 - It responded in 51ms

Non-Impacting Redundancy

• WEB_SERVER_4 is down

• But I have 8 servers, and only need 6 at full load

Spamming alerts

- \$THING is down!
 - For the 28345972398th time
 - Even if it's important you've stopped caring

- \$TEST_SERVER has no backups
 - I want it that way
- Most of the earlier items end up in this bucket





Related Practices

E-mail alerts

- It's not high priority enough to page, so I'll email about it
- delete
- Having a separate archived alert list may work well as a log

• Within a few weeks the entire team will have a filter to mark read &

Undocumented Alerts

- \$THING is broken!
 - So what am I supposed to do?
- Document actions to take in a "playbook"
- All oncallers should be able to follow

Alert Acceptance

- Have a review process for any new alerts or thresholds.
 - Require documentation, expected impact, test data, etc.
- Only oncallers should accept alerts.

Silencing

- If your alert system pages people you need a silence mechanism
- In practice this becomes a whole system
- Oncallers get very grumpy when woken up for other people's planned work
- If relevant may include need to schedule silences for things like carrier outages

Production by Fiat

- \$THING is now in production because I say so \$VP
 - Good luck

A Plug

Contains great selections on alerting, postmortems, availability & more.

THE PRACTICE OF CLOUD SYSTEM ADMINISTRATION

DESIGNING AND OPERATING LARGE DISTRIBUTED SYSTEMS



