

MONITORING & PRE-EMPTIVE SUPPORT

The road to achieving
five-nines on Beam

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Erlang & Elixir
Factory Lite Rome
#refl17



MONITORING & PRE-EMPTIVE SUPPORT

**The road to achieving
five-nines on Beam**

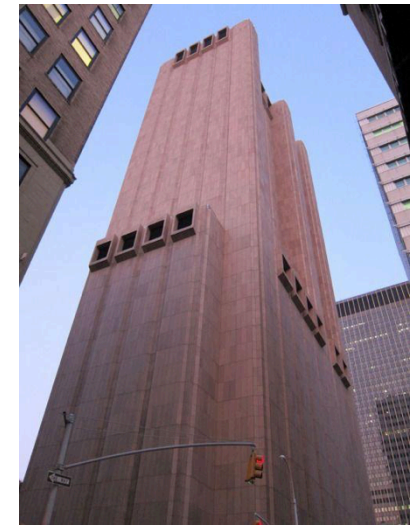
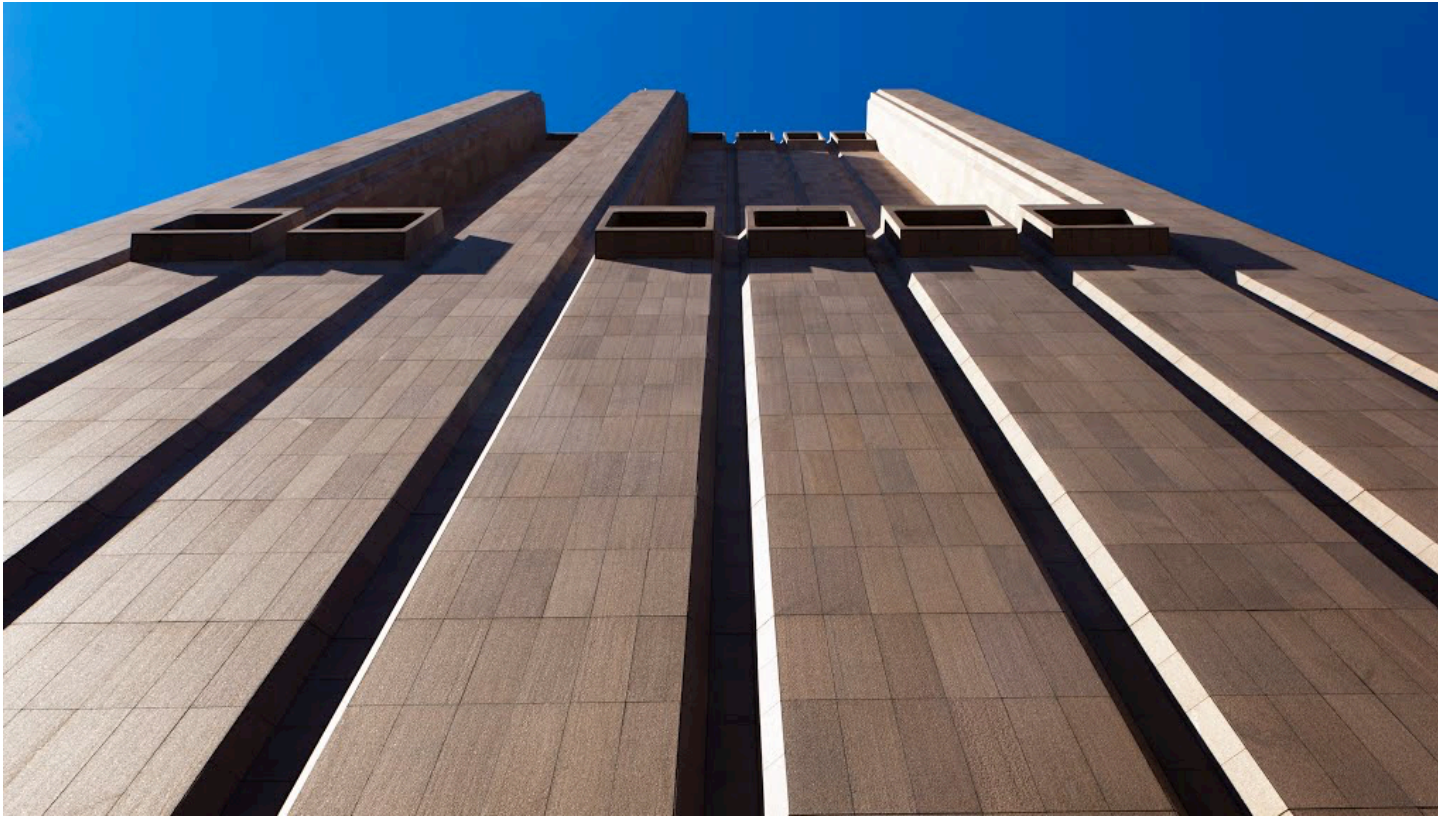
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Source: Google Advanced Image Search



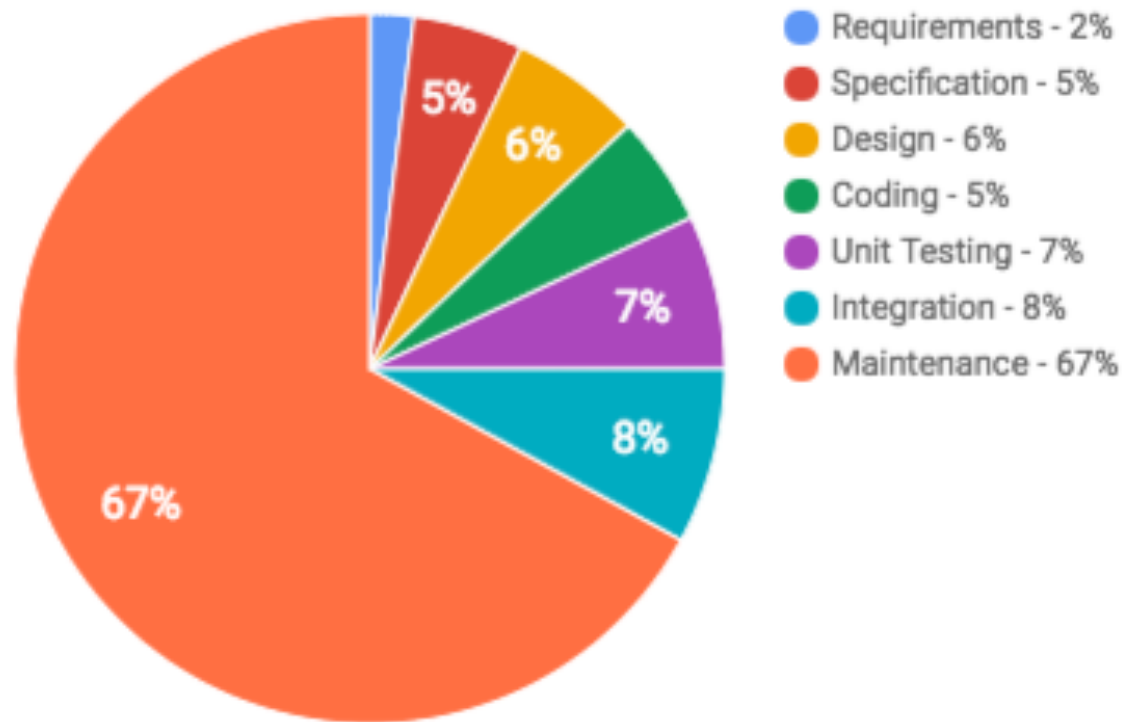
Source: Google Advanced Image Search



**Avoid
Single Points
of Failure!**

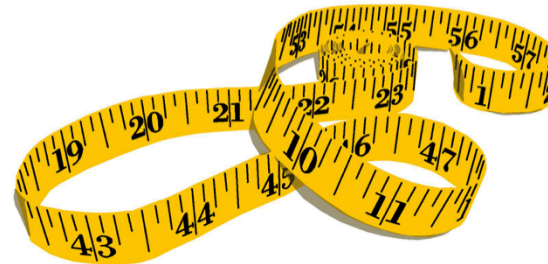
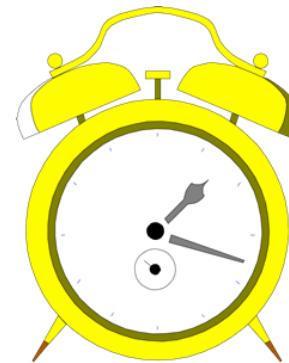
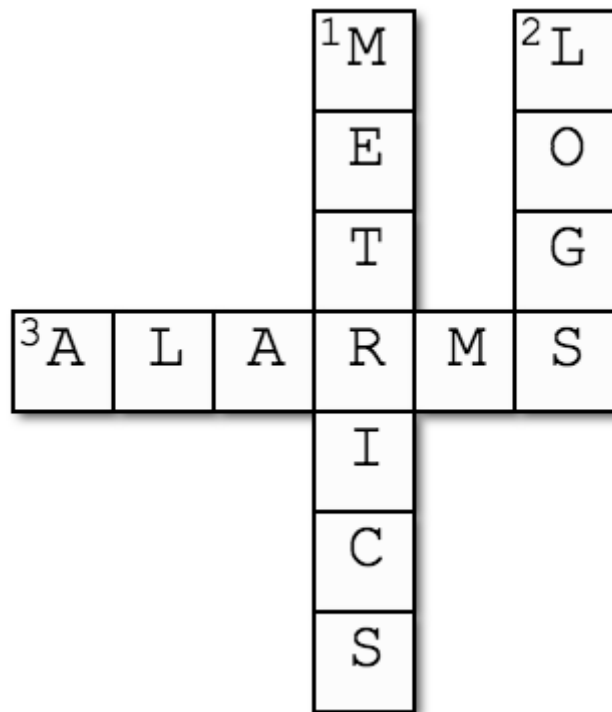
Source: Google Advanced Image Search

Software Life-Cycle Cost

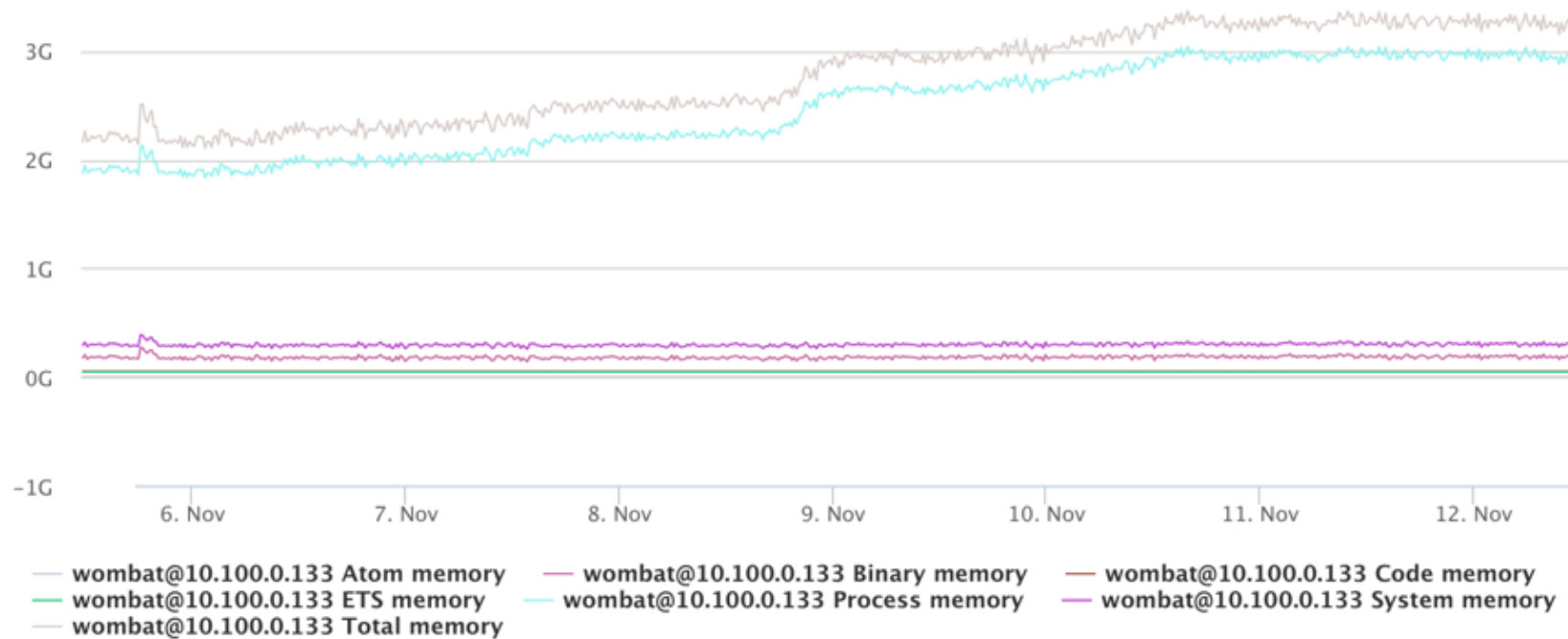


Source: Digital Aggregates

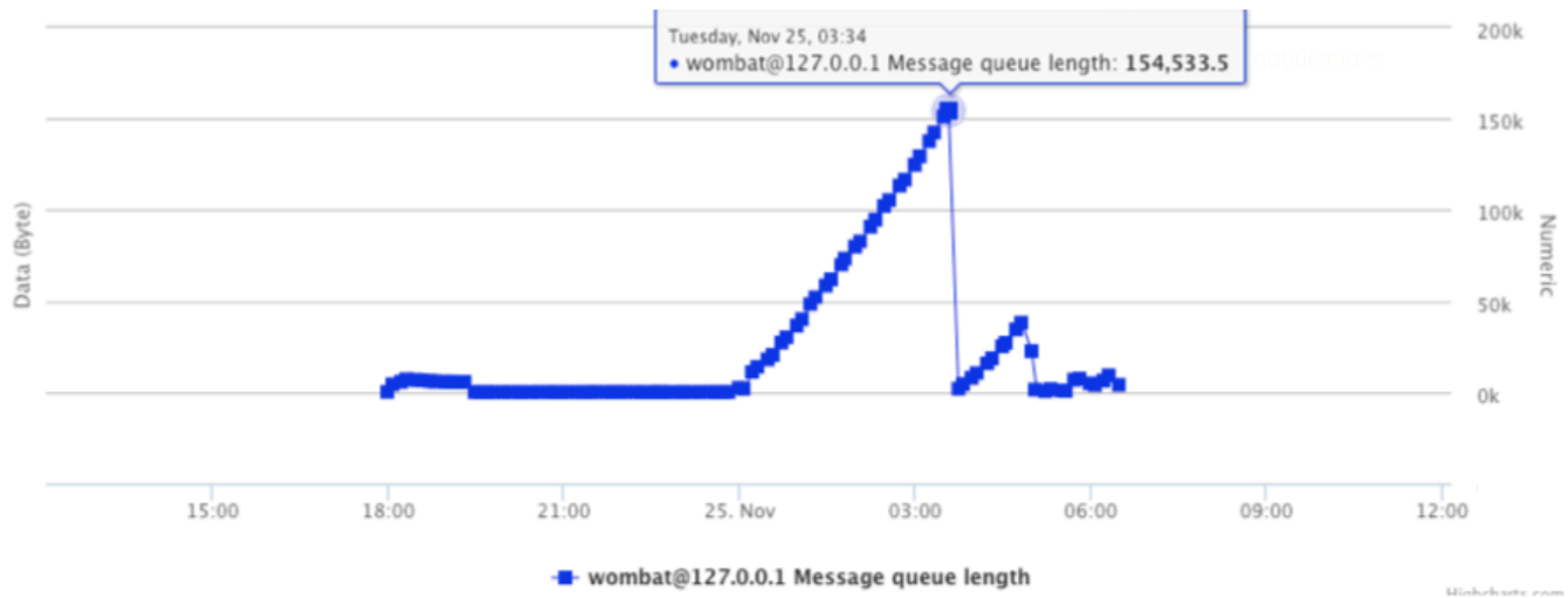
Monitoring



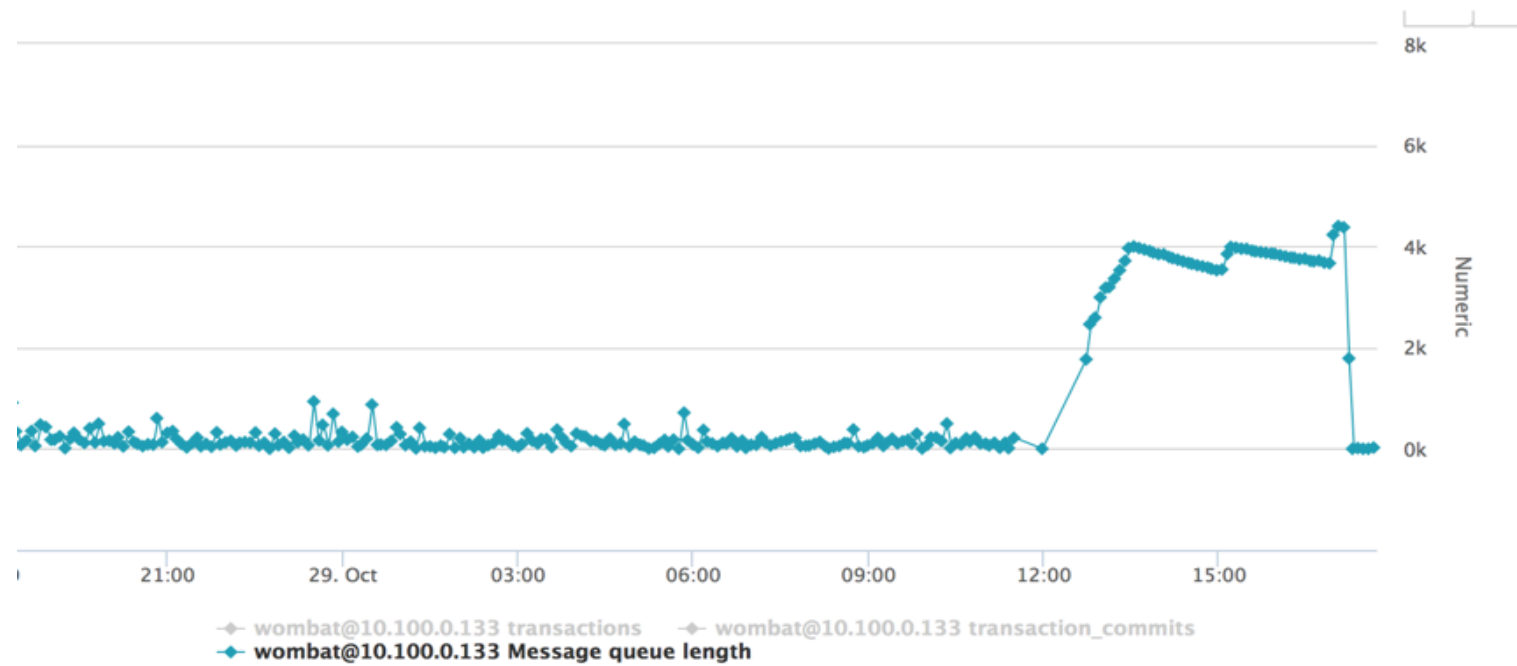
Metrics: Monitoring Memory



Metrics: Message Spike Causing a Restart

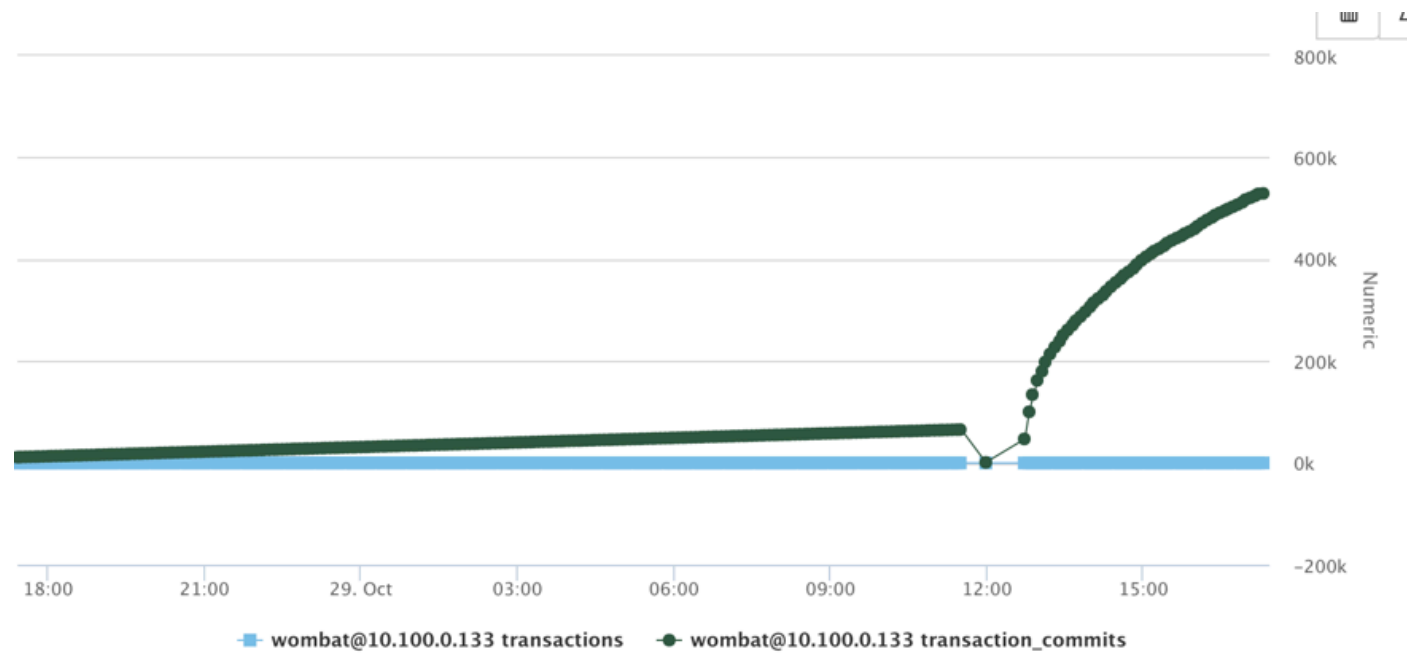


Metrics: Slow Recovery After a Restart



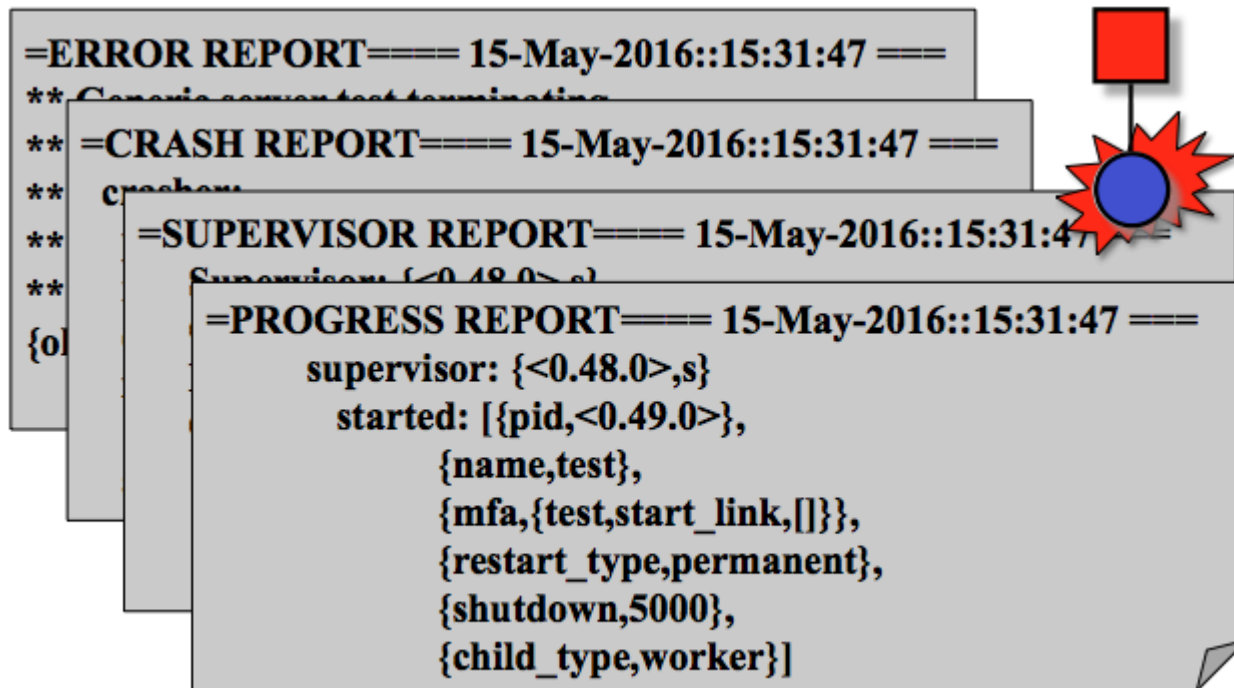
Highcharts.com

Metrics: Slow Recovery After a Restart



Highcharts.com

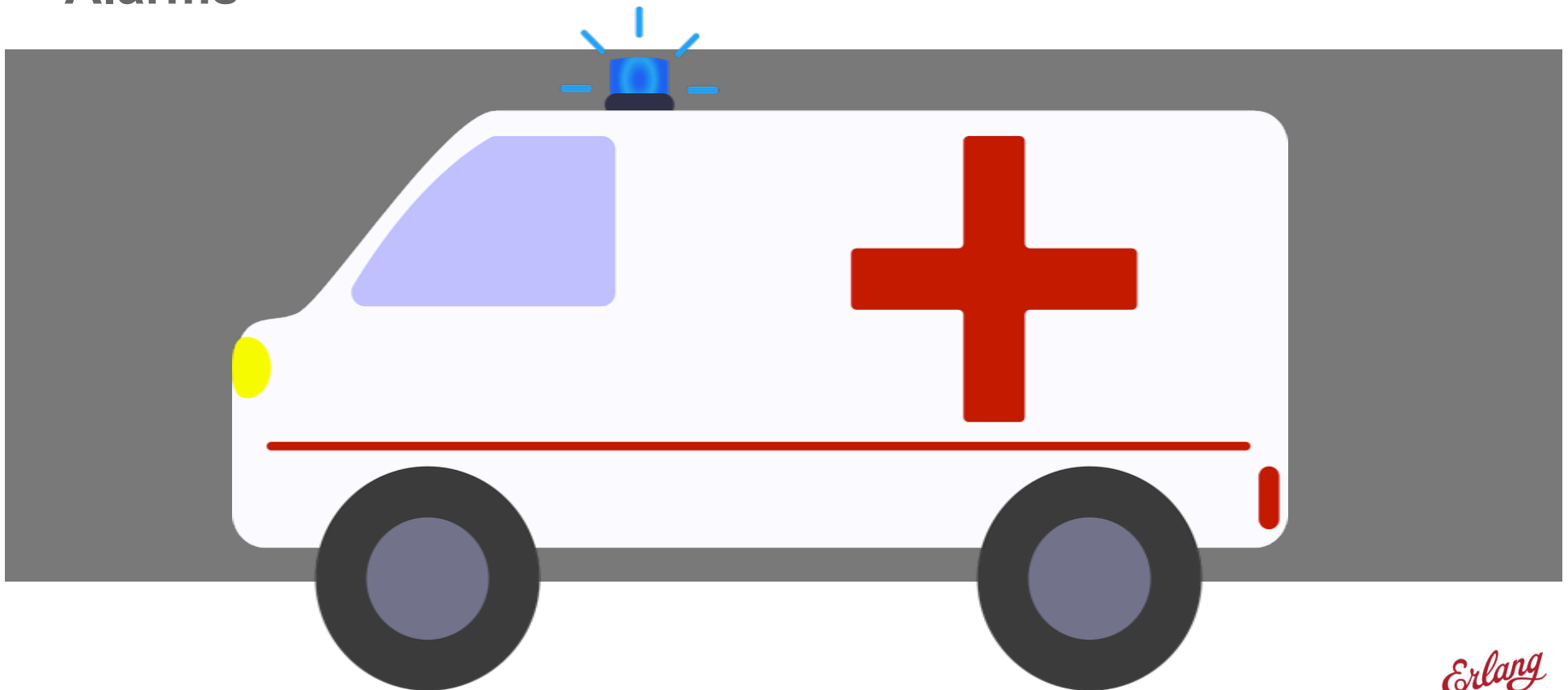
Logs: Process Termination and Restart



**"The truth is the log.
The database is a cache of
a subset of the log"**

Pat Helland

Alarms



Application filter

Show all▼

Manage listed alarms

Select items by:▼

Actions with selected items ▼

Open all

State	Severity	Date	Source	Alarm id	All: ☐
cleared	major	16:14:30	mongooseim@589569- [REDACTED]	node_down	▼ ☐
cleared	minor	2014-10-06 17:34:29	mongooseim@589569- [REDACTED]	process_message_queue_mi nor	▼ ☐
new	major	16:13:52	mongooseim@589569- [REDACTED]	process_message_queue_ major	▲ ☐

Additional
Info:

"Max message queue length with value 1262656 has exceeded limit: 100000"

Raw source
info:{wo_alarm_source,"38e12c1d-5d85-460b-b770-e9aec69f3b68", 'mongooseim@589569-
[REDACTED]',node_level,wombat}

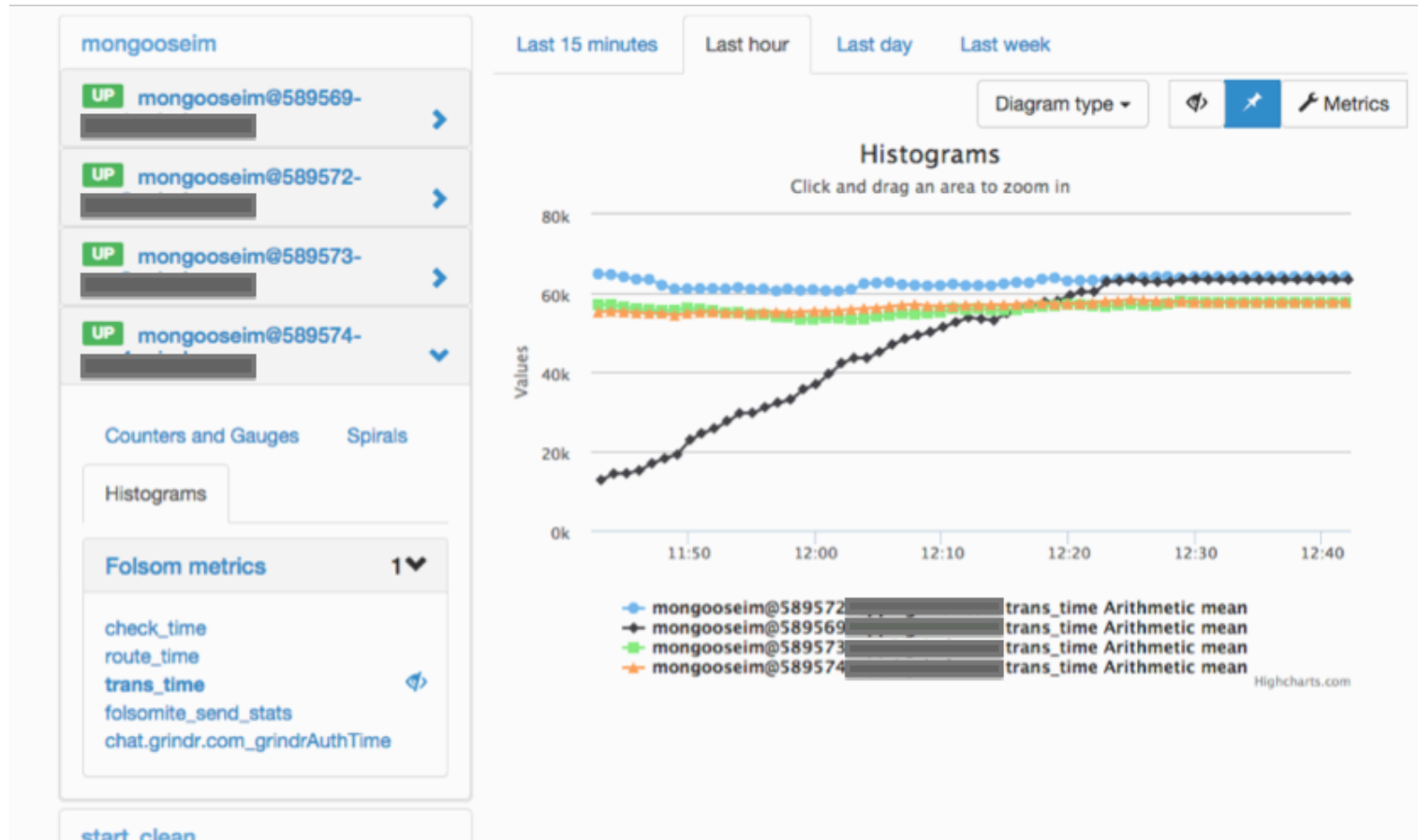
Acknowledge

Clear

Post comment

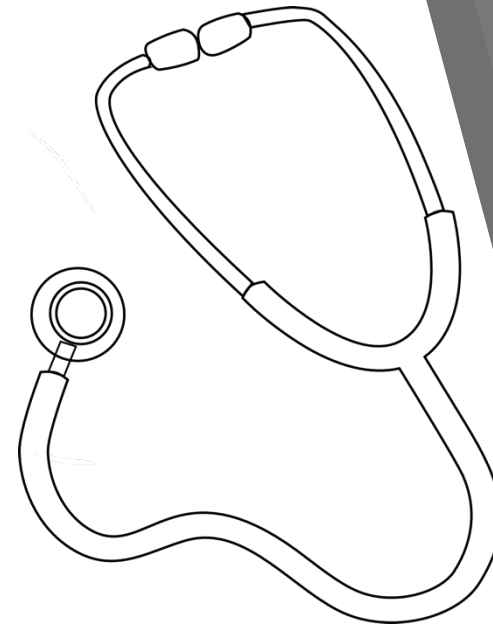
State	Severity	Date	Source	Alarm id	All: ☐
new	major	2014-10-06 16:07:45	mongooseim@589574- [REDACTED]	process_message_queue_ major	☒
new	major	2014-10-06 16:06:49	mongooseim@589573- [REDACTED]	ets_limit_major	☒
Additional Info: "ETS table count 2053 is exceeding 90% of limit (2053)" Raw source info: {wo_alarm_source,"cf05c9c2-599b-4dd2-bf2a-1e98bfba33fc", 'mongooseim@589573-[REDACTED]',node_level,wombat} Acknowledge Clear Post comment					
new	Indeterminate	2014-10-06 09:39:14	mongooseim@589574- [REDACTED]	{different_application_versi ons,mongodb}	☒
new	Indeterminate	2014-10-06 09:39:14	mongooseim@589573- [REDACTED]	{different_application_versi ons,mongodb}	☒
new	Indeterminate	2014-10-06 09:39:14	mongooseim@589572- [REDACTED]	{different_application_versi ons,mongodb}	☒
new	major	2014-10-03 11:58:34	[REDACTED] [REDACTED]	invalid_app_file	☒

State	Severity	Date	Source	Alarm id	All: ☐
		14:53:34			
new	Indeterminate	2014-10-03 14:53:34	mongooseim@589569- [REDACTED]	missing_runtime_dependen cies	☐
new	Indeterminate	2014-10-03 14:53:33	mongooseim@589569- [REDACTED]	{different_application_versi ons,mongodb}	☐
Additional Info: "Application (mongodb) versions are different on family (mongooseim) : mongooseim@58956[REDACTED]'s version: \"6c15700\"~n, mongooseim@589572- [REDACTED] version: \"4d4d932\"~n, mongooseim@58957[REDACTED]'s version: \"4d4d932\"~n, mongooseim@58957[REDACTED]'s version: \"4d4d932\"~n" Raw source info: {wo_alarm_source,\"38e12c1d-5d85-460b-b770-e9aec69f3b68\", 'mongooseim@589569- [REDACTED]',node_level,wombat} Acknowledge Clear Post comment					
new	major	2014-10-02 16:31:59	mongooseim@589572- [REDACTED]	process_message_queue_ major	☐
new	major	2014-10-02	mongooseim@589574- [REDACTED]	invalid_app_file	☐



Why do you need to monitor?

- ▶ Pre-emptive Support Automation
- ▶ Post-mortem Debugging





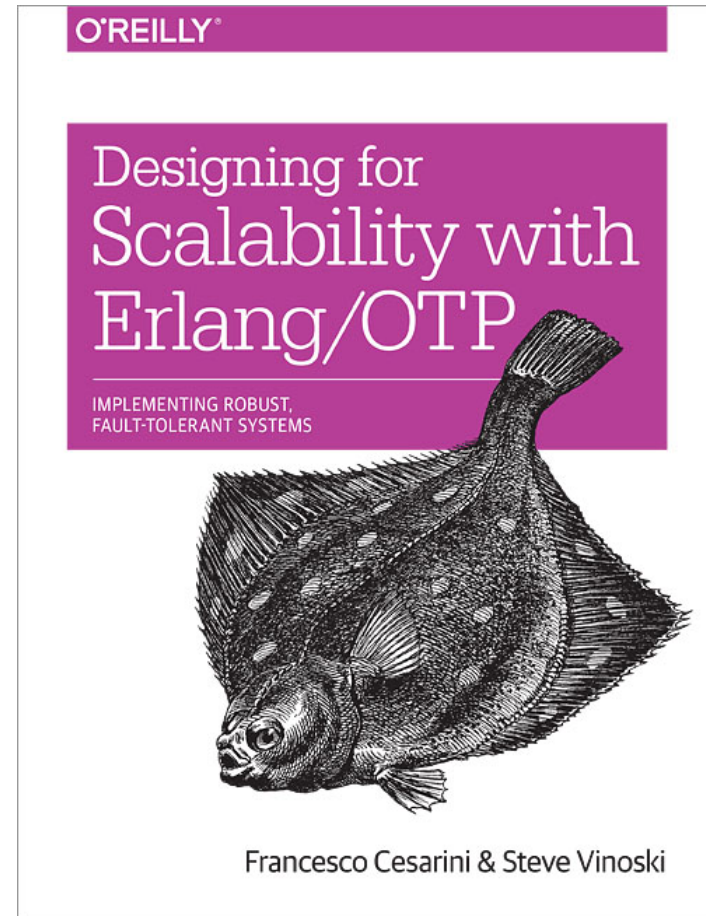
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THANK YOU!

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