From Monitoring to ITSM

Felix Kronlage @felixkronlage fkr@gridscale.io

"Monitoring strategy should start from the business KPIs."

– Devdas Bhagat

OSMC

"Monitoring needs to enable your team to engage"

– at Monitorama a while ago

OSMC

$ finger fkr

OSMC

gridscale

OSB Open Source Business ALLIANCE

bytemine

OSMC

ITSM

"I**T service management** (**ITSM**) refers to the entirety of activities – directed by policies, organized and structured in processes and supporting procedures – that are performed by an organization to design, plan, deliver, operate and control information technology (IT) services offered to customers."

OSMC

"I**T service management** enables us to deliver a superior customer experience when things go wrong"

…and things will go wrong.

OSMC

Building blocks

SOP

Monitoring

Service Desk

Asset Management

OSMC

A Process should…

- …enable people in your organisation to engage autonomously
- …be a guidance, not a handcuff
- …make things easier

Take the process from being implicit to being explicit

OSMC

“Reasons - not rules”

– h5b

OSMC

SOP

- Standard Operating Procedures
- Simple building blocks for establishing a process
- Help increase quality by establishing standards
- Bonus: lower the barrier for newcomers to the org

OSMC

Monitoring

Monitoring…or metrics?

- Something that generates events…
- …and possibly alerts on those
- icinga for example

OSMC

Monitoring should…

- …trigger a genuine action
- …disrupt your routine
- …assist in achieving higher quality

OSMC

Service Desk

OSMC

Service Desk

- Papertrail for customer interaction
- Better handover in between teams
- Handle customer expectations
- Raises the overall quality in customer interaction

OSMC

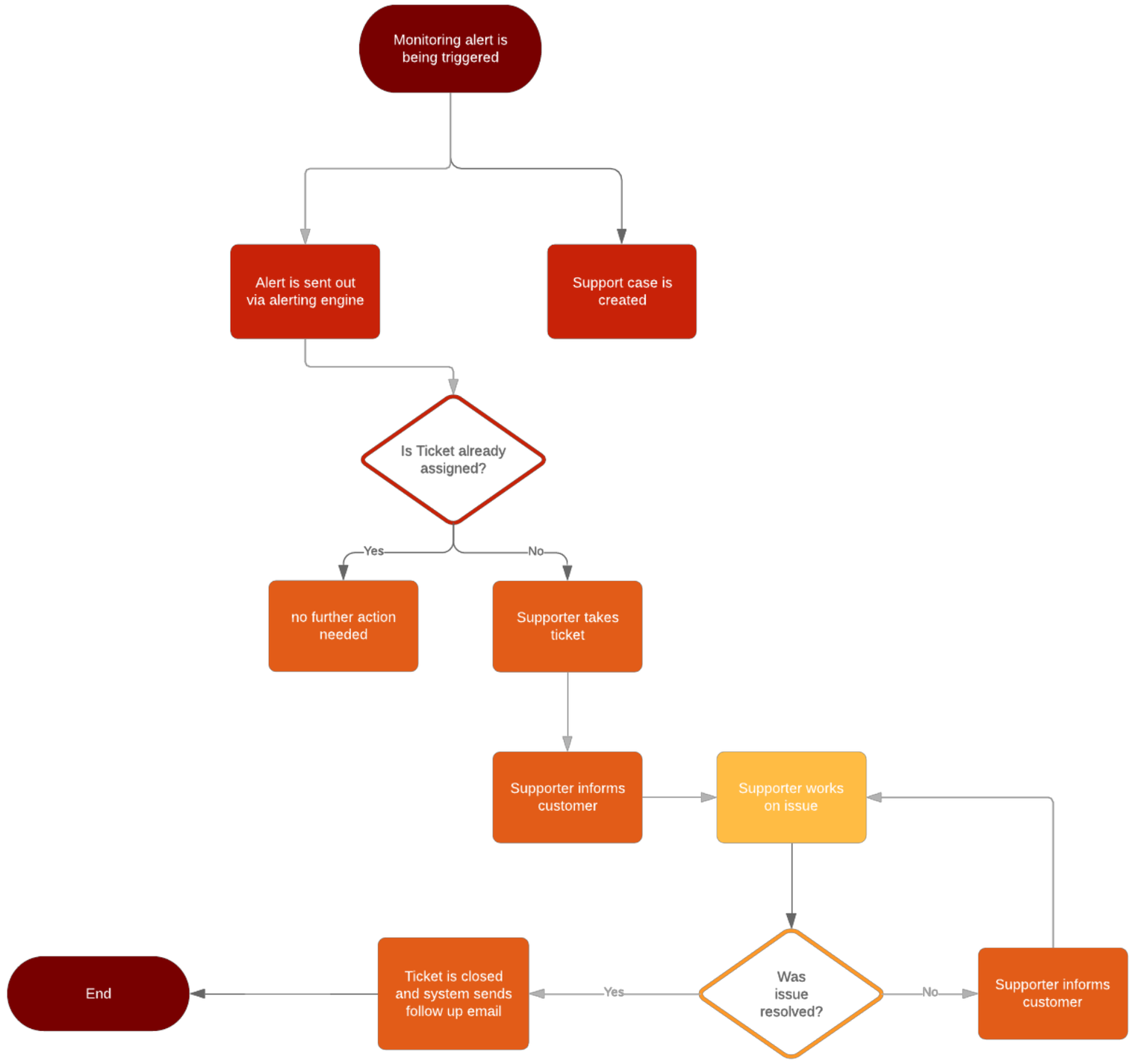
Asset Management

- The toughest of the four - imho
- Various solutions - all feel bulky at first
- Try something lean
  - built-into RT
  - idb - https://github.com/idb-project/

OSMC

- Process
- Monitoring
- Service Desk

OSMC


Monitoring alert is being triggered
Alert is sent out via alerting engine
Support case is created
Is Ticket already assigned?
Yes
No
no further action needed
Supporter takes ticket
Supporter informs customer
Supporter works on issue
Was issue resolved?
No
Supporter informs customer
Yes
Ticket is closed and system sends follow up email
End

connecting things

(or how I stopped worrying and started loving the glue code)

OSMC

json-rt-api

OSMC

json-rt-api

- ruby based wrapper around ‘rt’-cli
- exposes a json http api
- can be hooked into icinga1 via commands
- https://blog.bytemine.net/2015/06/29/Integrating-monitoring-with-Request-Tracker/
  - https://github.com/bytemine/json-rt-api

OSMC

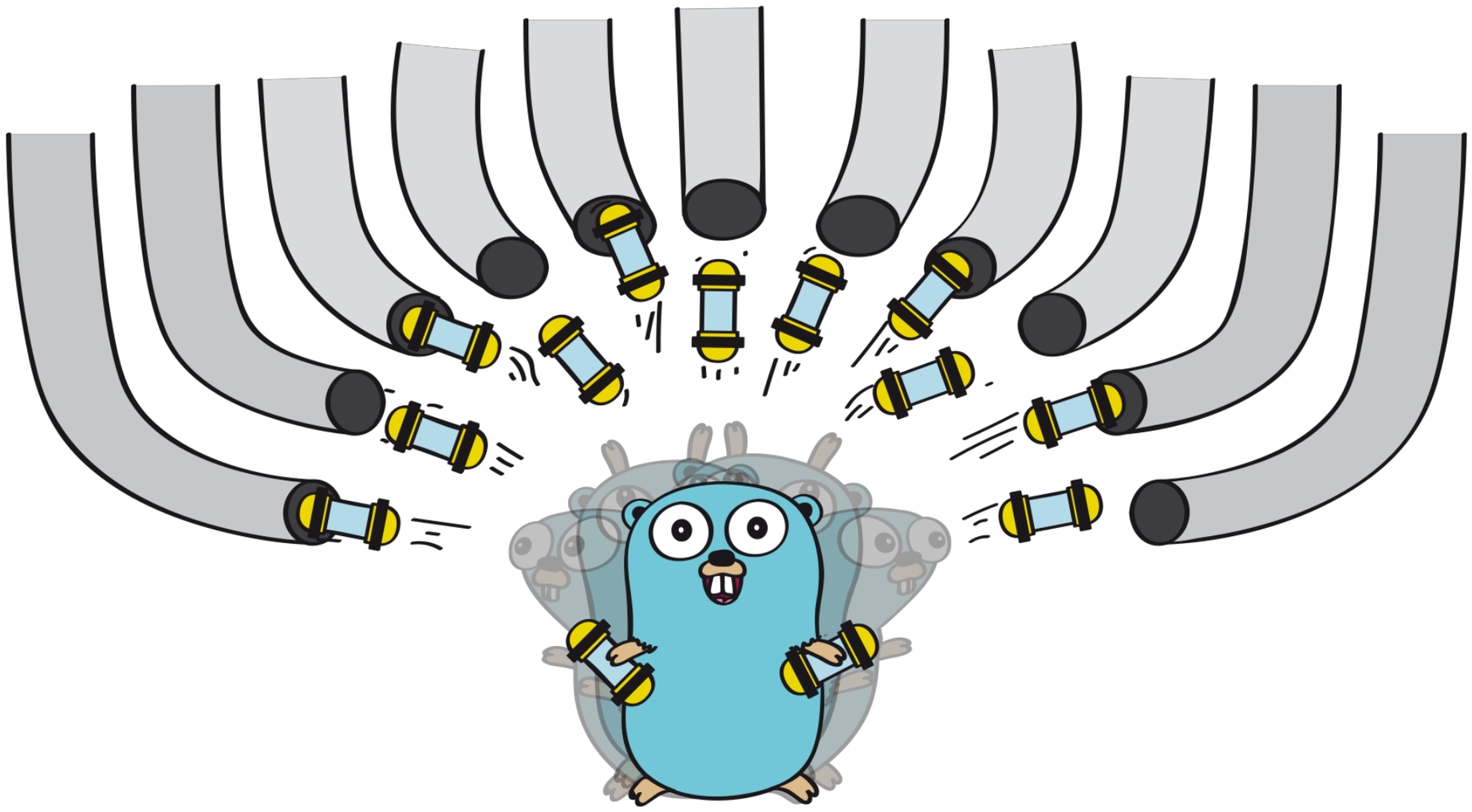
icinga2rt

OSMC

icinga2rt

- Golang based - single static binary
- Wraps the icinga2 event API
  - https://github.com/bytemine/go-icinga2
- Submits events to RT-REST
- https://github.com/bytemine/icinga2rt

OSMC



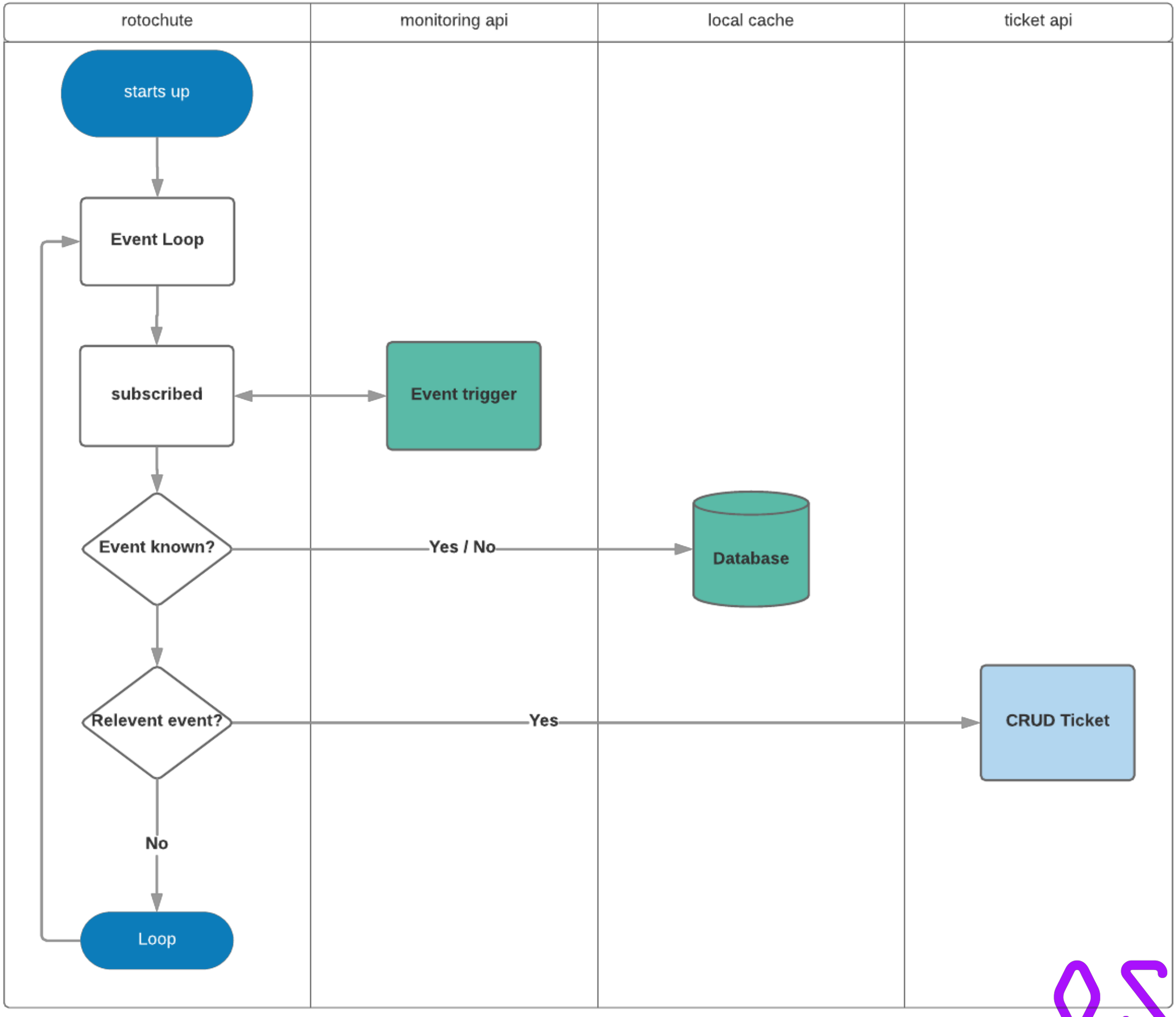
rotochute

OSMC

rotochute

- icinga2rt revisited
- employs RT-REST2
- Bonus: easy addition of further ticketing
- https://g.hazardous.org/fkr/rotochute

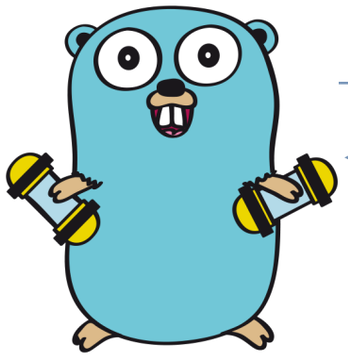
OSMC


rotochute
monitoring api
local cache
ticket api
starts up
Event Loop
subscribed
Event trigger
Event known?
Yes / No
Database
Relevent event?
Yes
CRUD Ticket
No
Loop

```
# ignore OK events if no old state is known
OK,,false,ignore
# delete ticket if unowned and was WARNING, CRITICAL or UNKNOWN
OK,WARNING,false,delete
OK,CRITICAL,false,delete
OK,UNKNOWN,false,delete
# comment ticket if unowned and was WARNING, CRITICAL or UNKNOWN
OK,WARNING,true,comment
OK,CRITICAL,true,comment
OK,UNKNOWN,true,comment
[...]
```

OSMC

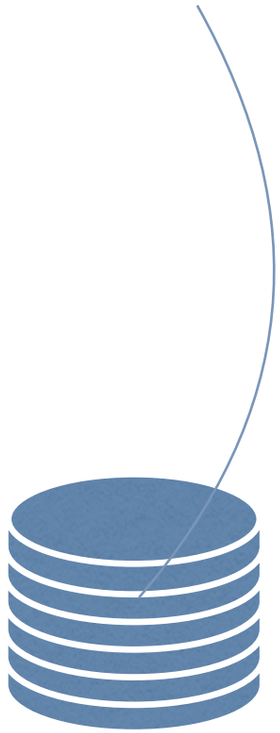
rotochute



monitoring event stream

ticketing api

ticketing



OSMC

What's next?

rotochute lookout

- Finish support for Zammad
- Hook into Prometheus
- Allow for arbitrary outbound configurable webhooks

OSMC

Further Resources

- https://github.com/Icinga/icinga2-api-examples
- https://github.com/abh/rt-docker
- https://github.com/zammad/zammad-docker

Thanks for listening!

OSMC

Thanks to the awesome OSMC / netways crew!

fkr@gridscale.io
@felixkronlage

OSMC

Credits

- Slide 2, Quote: https://twitter.com/f3ew/status/1037268168153214976
- Slide 6, Definition ITSM from Wikipedia: https://en.wikipedia.org/wiki/IT_service_management
- Slide 12, https://twitter.com/l0x1r4n
- Slide 14, https://www.pinterest.com/pin/885943176435952 02/
- Slide 17, Logos taken from the official project sites
  - Request Tracker: https://bestpractical.com
  - Zammad: https://zammad.org
  - OTRS: https://otrs.com
- Slide 27, rotochute logo done by Erika Offen, based on the golang gopher

OSMC