

Monitores de sistema

NAGIOS (→ Naemon), SHINKEN, ICINGA,
ZABBIX, CACTI, MUNIN, GANGLIA ,etc.

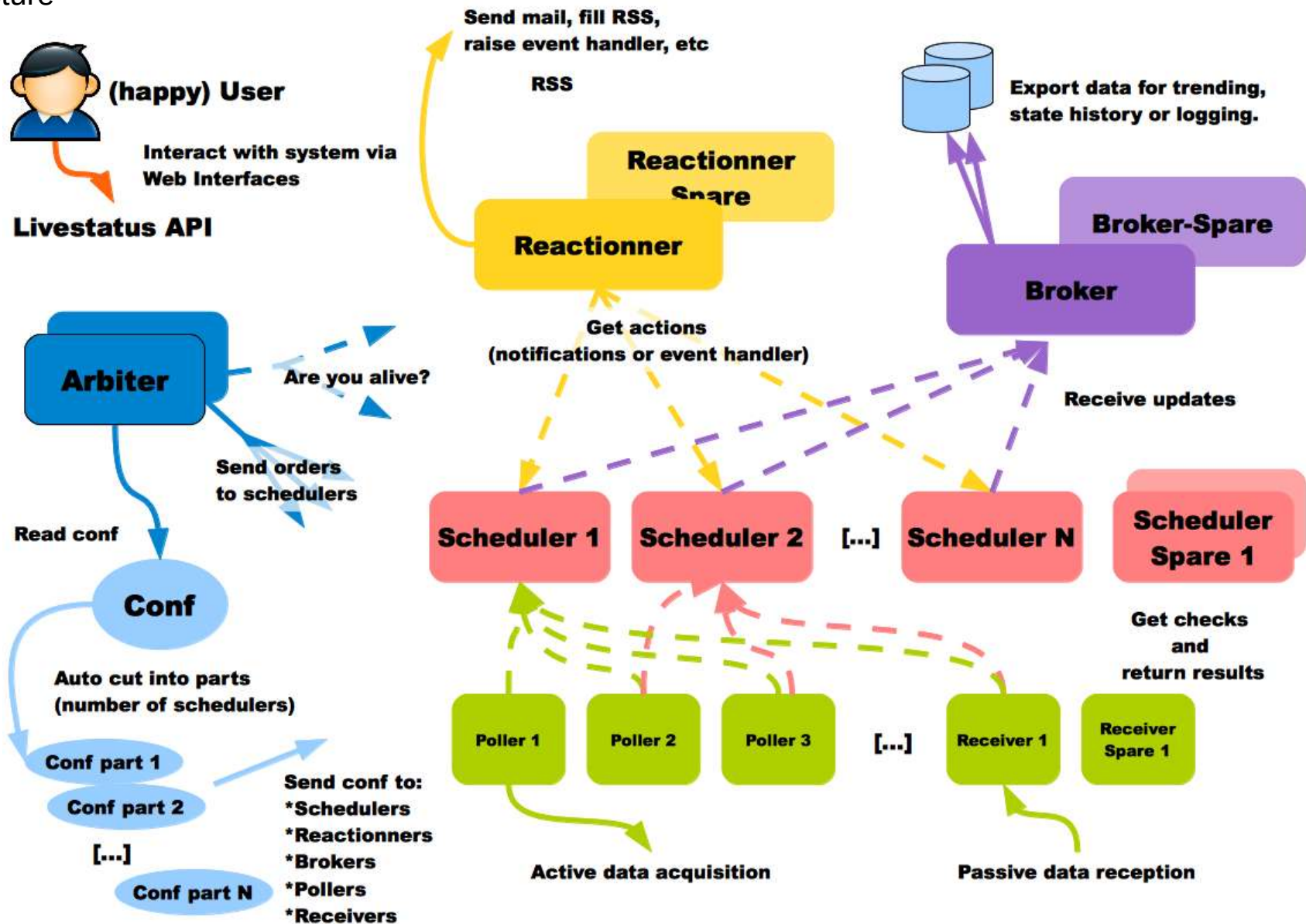
Qué alternativas hay y cómo elegir una

- Monitores hay muchos, muchos...
 - https://en.wikipedia.org/wiki/Comparison_of_network_monitoring_systems
 - <https://sysadmin.libhunt.com/categories/1745-monitoring>
- ¿cuál elegir? ¿qué métricas?
 - <https://streamdata.io/blog/how-we-chose-our-monitoring-software/>
 - <https://stackshare.io/stackups/nagios-vs-shinken>
- ¿Cómo mostrar los datos?
 - web user interfaces...
 - http://shinken.readthedocs.io/en/latest/11_integration/use-shinken-with.html

Shinken: Arquitectura

- Sigue la filosofía Unix: una herramienta, una tarea

http://shinken.readthedocs.io/en/latest/09_architecture/the-shinken-architecture.html#architecture-the-shinken-architecture

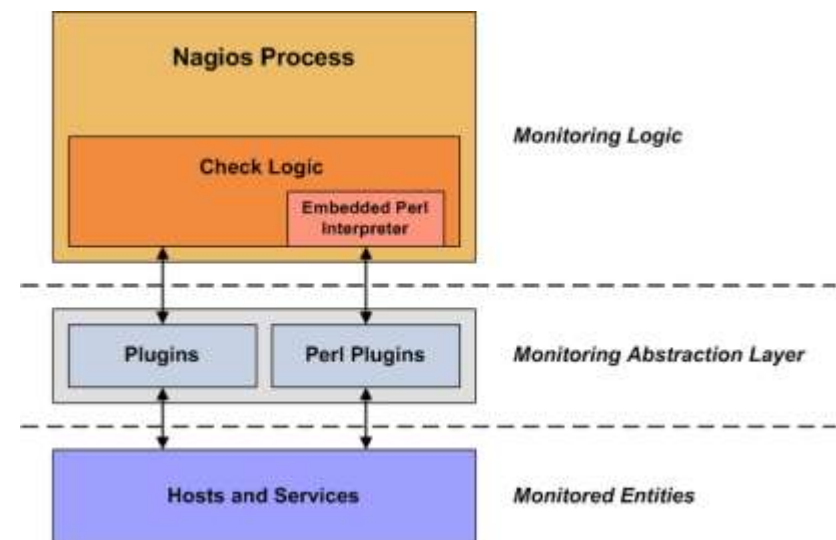


Shinken

- Se basa en el concepto de plugin
 - Monitoring Plugins Project: <https://www.monitoring-plugins.org/>
 - Nagios Downloads Page: <http://www.nagios.org/download/>
 - NagiosExchange.org: <http://www.nagiosexchange.org/>
- Los distintos servicios pueden ejecutarse en el mismo servidor o ser repartidos en una infraestructura distribuida.
 - Para satisfacer los requisitos de resolución, capacidad de almacenamiento, etc.
- Se recomienda el uso de varios planificadores (Schedulers) incluso si se están ejecutando en el mismo servidor físico.

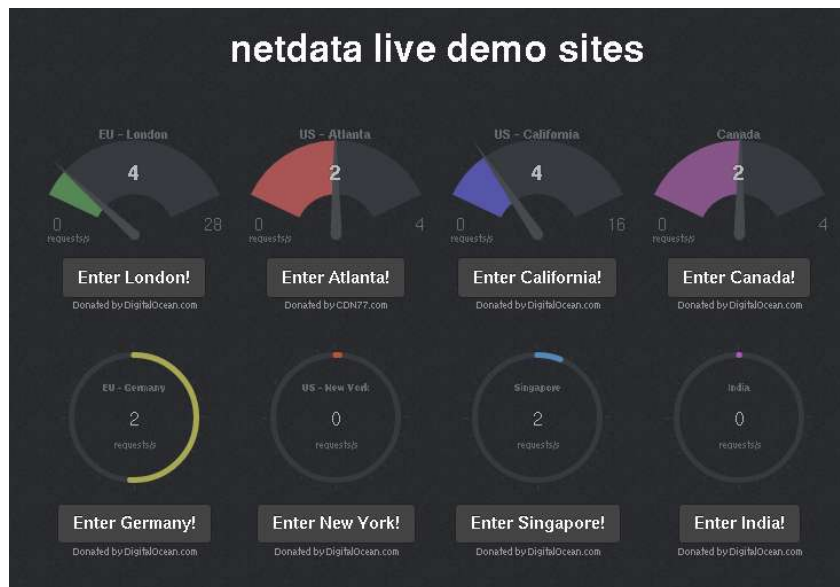
¿Qué son los plugins?

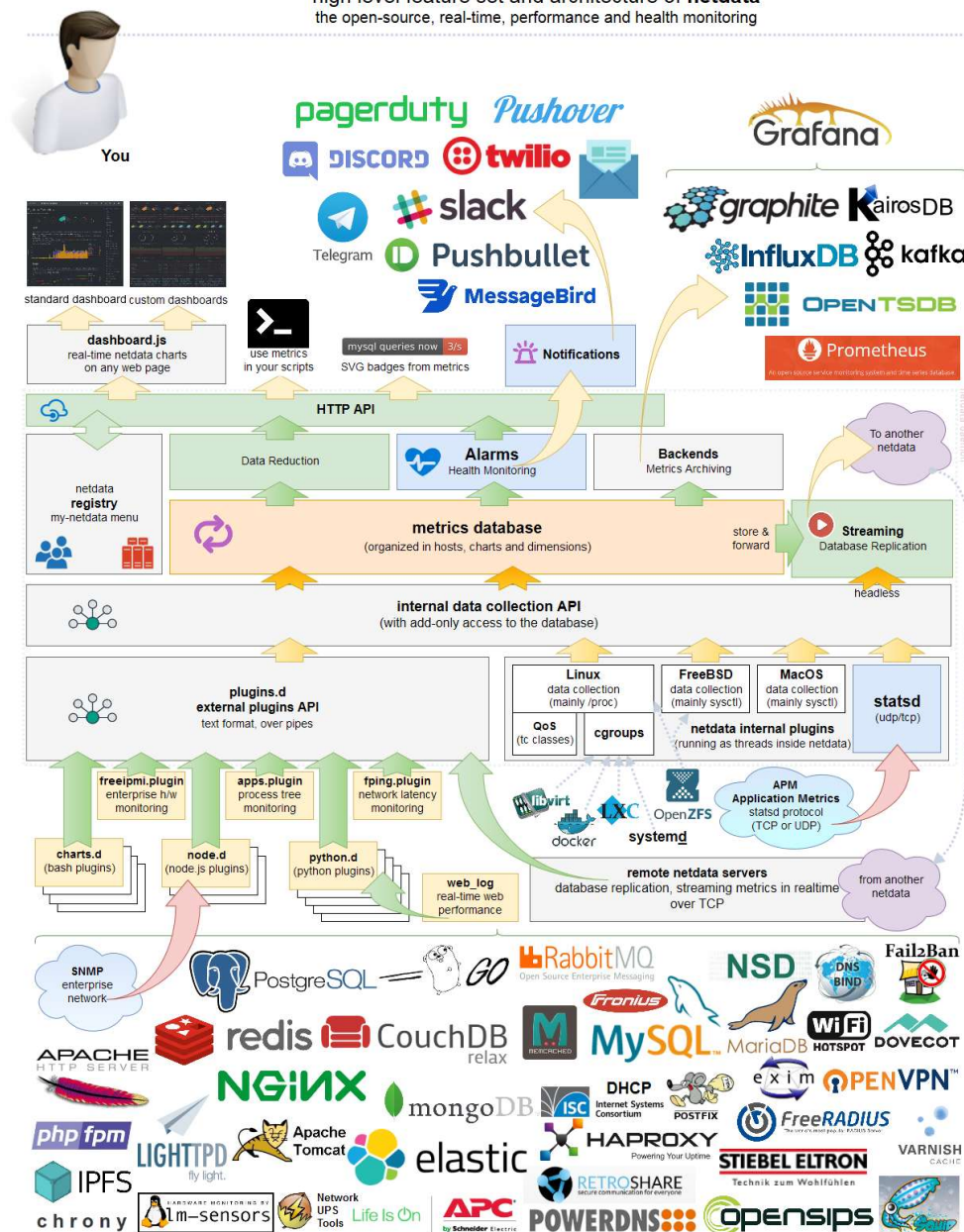
- <http://www.naemon.org/documentation/usersguide/plugins.html>
- Son pequeños programas o scripts que sondean/comprueban/recopilan lo que queremos monitorizar
- ¿Quién los ejecuta?
 - xinetd (extended Internet daemon). Escucha en todos los puertos de los servicios que gestiona y, cuando llega una petición (de Nagios), arranca el servidor (plugin → script, programa) para ese servicio (elemento monitorizado).
 - Debe ser sustituido por las Units de systemd



netdata

- Para Tiempo Real
 - <http://my-netdata.io/>
 - <https://fedoramagazine.org/monitor-linux-netdata/>
- Vemos demos
 - <https://my-netdata.io/#demosites>





netdata is a monitoring agent: you install it on all your systems:

- supports auto-detection and zero configuration for most applications and systems
- is real-time: every metric is on your dashboard in just 1-second (collection to visualization)
- is fast: for a few thousand metrics per second, it needs just 1% CPU of a single core
- and efficient: it needs a few MB of RAM and no disk I/O at all while it runs
- also, it is embeddable, extensible, and open-source (GPL v3+)

...and netdata runs everywhere:



netdata
simple. effective. awesome!
<https://my-netdata.io>

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¿Abrumador? Conozcamos OMD

- Dado que siempre hay un cliente que monitoriza ¿por qué no hacer una distro con “todo” instalado? → Open Monitoring Distro
 - <http://omdistro.org/>
 - <https://labs.consol.de/omd/>
- Idea: Nagios + plugins comunes + dashboard (chech_mk)
 - Evolución: Naemon + plugins + Thruk
- Viene como paquete que se puede instalar en un sistema ya funcionando:
 - <http://files.omdistro.org/releases/>

¿Qué es Naemon?

- <https://labs.consol.de/nagios/2014/01/24/have-you-heard-about-naemon.html>
- A few months ago, Andreas Ericsson, the main developer of Nagios 4, has been kicked from the Nagios Developer Team for personal reasons. So he decided to continue development in a new fork called Naemon. The result so far is quite impressive.
- Right after closing the Nagios users and developer mailing lists, Andreas got kicked so it seems like someone did not want give people a place to discuss about such behaviour. Although the official Monitoring Plugins Team has already setup replacement nagios mailing lists.. At that point nobody knew that the Plugins Team will be kicked later too, but thats a different story.
- Since then, a lot of things have already been done to make Naemon the better alternative to Nagios 4.
 - the CGIs have been replaced with Thruk
 - Livestatus API is already included
 - Worker Model for faster Host/Service Check execution
 - Easy installation with RPM/DEB packages

So far, the Naemon Developer Team consists of 4 people already, and there are likely more to come. Especially since there is a break in between the community and Nagios Enterprise.

Plugins disponibles en OMD

- Con la instalación tenemos, entre otros, algunos plugins comunes para Nagios y Naemon:
 - ls -lah
/opt/omd/versions/2.60-labs-edition/lib/nagios/plugins
 - ls -lah /opt/omd/versions/2.60-labs-edition/lib/naemon/plugins
- Probemos uno: check_http

```
root@ubuntu:/omd/sites/prueba/etc/naemon# /opt/omd/versions/2.60-labs-edition/lib/nagios/plugins/check_http 192.168.56.105
HTTP OK: HTTP/1.1 200 OK - 11595 bytes in 0,001 second response time |time=0,001073s;;;0,000000;10,000000 size=11595B;;;0
```