

#### Monitoring with Nagios/Icinga

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Meeting No. 4 23. May 2019

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#### Agenda

- Introduction
- little History about Nagios and icinga
- Monitoring with Nagios/icinga
- Demo

# Why Monitoring!?

- System/Application status
- Performance
- Notification
- Action





www mail dns



www mail dns



www mail dns



www mail dns



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www mail dns





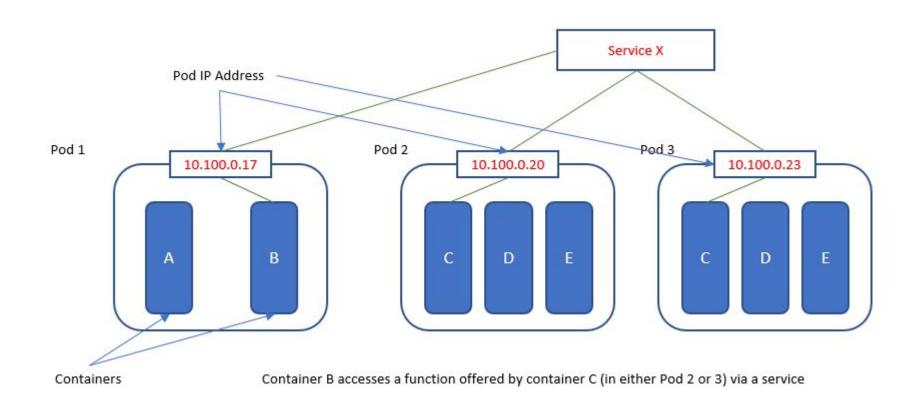
www mail dns

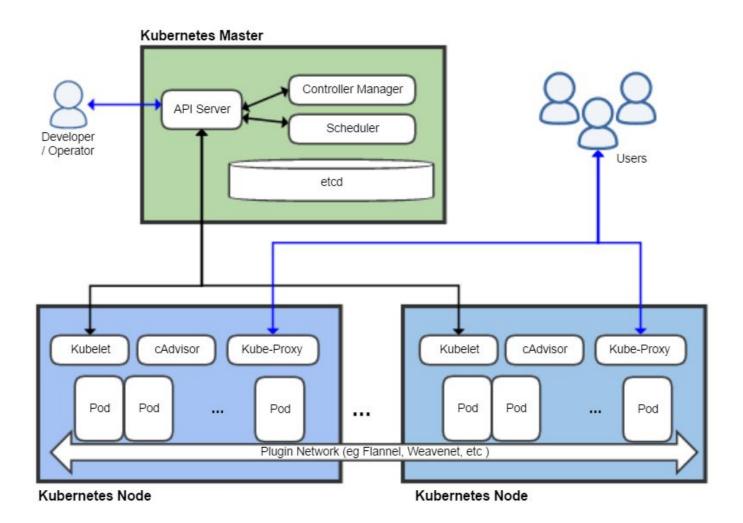


www mail dns



www mail dns





# Why nagios/icinga?

- Monitoring things is very easy
- very simple software stack
- no complex external dependencies
- active checks are powerful
- gathering performance data
- hugh community
- thousands of plugins

# Nagios®



#### History - nagios

First release: 14. March 1999

Last Version 4.4.3 (15.01.2019)

Author: Ethan Galstad

Website: www.nagios.org

Written in C

#### History - icinga

First release: May 2009 (Fork from nagios)

Jun 2014 icinga2 start with new code

Last Version 2.10.4 (19.03.2019)

Author: netways

Website: www.icinga.com

Written in C++

- 1. aktiv-Checks:check -> Result -> Action
- passive-Checks:
   wait for Result -> Action
  - Check interval
  - Retry interval
  - notification interval
  - notification period

#### Check

snnmp: Server / Switch / ...

Check tcp/udp Port ICMP ....

Check on a System via nrpe or icinga2a client

your check

# Check

Plugin Return Code	Service State	Host State
0	OK	UP
1	WARNING	UP or DOWN/UNREACHABLE*
2	CRITICAL	DOWN/UNREACHABLE
3	UNKNOWN	DOWN/UNREACHABLE

## Now Action .... Check-result

0 - OK



#### Now Action .... Check-result

1 - WARN

2 - Crit



## Warn or Crit ... and now?!

Monitoring do what you want ....

- Soft or Hard state?
  - a. Soft check again
  - b. Hard do a defined action

## Action ...

```
Notify
```

How: via email, sms, call, ... Who: 24x7, admin, CIO, ...?

When: 24x7, Workinghours, student days, ...

or ....

Do something

Don't forget ...

Acknowledge the Event!!!

#### Checks

#### Standard

check\_snmp, check\_ntp, check\_game, check\_http, check\_mrtgtraf, check\_ldap, check\_apt, check\_pgsql, check\_dig, check\_ping, check\_cluster, check\_mrtg, check\_overcr, check\_by\_ssh, check\_tcp, check\_dbi, check\_load, check\_smtp, check\_radius, check\_time, check\_swap, check\_ntp\_time, check\_users, check\_mysql\_query, check\_nt, check\_dns, check\_ide\_smart, check\_dummy, check\_procs, check\_disk, check\_hpjd, check\_fping, check\_uptime, check\_ups, check\_nwstat, check\_real, check\_ssh, check\_mysql, check\_ntp\_peer, check\_nagios, check\_snmp, check\_procs, check\_http, check\_nt

#### Checks

From other users:

https://exchange.nagios.org

There are 5773 listings in 457 categories on Nagios Exchange! (15.05.2019)

#### Check

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#### Performance data!!!

Nagios 3 and newer will concatenate the parts following a "|" in a) the first line output by the plugin, and b) in the second to last line, into a string it passes to whatever performance data processing it has configured

This is the expected format: 'label'=value[UOM];[warn];[crit];[min];[max]

# Different nagios / icinga

#### Icinga2 has:

- Cluster
- failover mechanism
- configuration is distributed
- shared monitoring information
- Zones for multitenancy environments
- modular (Kern und Add-Ons)
- feature enable

#### Demo

http://nagioscore.demos.nagios.com/nagios/
(nagiosadmin/nagiosadmin)

https://icinga.com/demo/authentication/login (demo/demo)

# **Important**

- respond to messages
- look at the surface
- Acknowledge the Event
- Notify the right people

# **Important**

CHECK!!!



#### **Thanks**

