

# Monitoring Overview

Christian Külker

2021-05-19

## Contents

|           |                                |          |
|-----------|--------------------------------|----------|
| <b>1</b>  | <b>Introduction</b>            | <b>1</b> |
| <b>2</b>  | <b>Overview</b>                | <b>2</b> |
| <b>3</b>  | <b>Other</b>                   | <b>3</b> |
| <b>4</b>  | <b>Web Interfaces</b>          | <b>3</b> |
| <b>5</b>  | <b>Source</b>                  | <b>3</b> |
| <b>6</b>  | <b>Conference</b>              | <b>3</b> |
| <b>7</b>  | <b>Links</b>                   | <b>3</b> |
| <b>8</b>  | <b>History</b>                 | <b>4</b> |
| <b>9</b>  | <b>Disclaimer of Warranty</b>  | <b>4</b> |
| <b>10</b> | <b>Limitation of Liability</b> | <b>4</b> |

## 1 Introduction

Free Open Source Software has a long tradition in providing system monitoring software. And this domain is still a stronghold for traditional programming languages of system administrators, shell and Perl.

This overview distinguish basically two different kind of Monitoring software: All purpose server monitoring and special device monitoring. Of course the borders are blurred. While MRTG started as a special network device monitoring tool where the focus is to know what happened in the past. For example how much traffic has been seen last month. This

is marked as 'Usage'. The other solutions, like the Nagios orientated ones, focus more on the question if a certain server is up or not and if the data of certain devices are in expected ranges or not. This is marked as 'Mon.'

## 2 Overview

| Software    | Language/Dependency    | Query | Deb | Kind  | License   | URL |
|-------------|------------------------|-------|-----|-------|-----------|-----|
| CACTI       | PHP5 Mysql Perl Apache |       | yes |       | GPL       | ➔   |
| CENTREON    |                        |       |     |       |           |     |
| CHECK_MK    |                        |       |     |       |           | ➔   |
| GANGLIA     | C, Perl, PHP, Python   |       | yes |       |           | ➔   |
| ICINGA      | Perl                   | Nag.  | yes | Mon.  | GPLv2/3   | ➔ ➔ |
| ICINGA2     | C++, web: PHP          | Nag.  | yes | Mon.  |           | ➔ ➔ |
| MANTIS      |                        |       |     |       |           |     |
| MRTG        | Perl                   | SNMP  | yes | Usage |           | ➔   |
| MUNIN       | Perl httpd             |       | yes | Usage |           | ➔   |
| NAV         |                        |       |     |       | GPLv3     | ➔   |
| NETSAINT    |                        |       |     |       |           |     |
| NAGIOS3     | Perl                   | Nag.  | yes | Mon.  |           | ➔   |
| OBSERVUM    | PHP                    | SNMP  | no  |       | Observium | ➔   |
| OPSVIEW     |                        |       |     |       |           |     |
| OP5/NINJA   |                        |       |     |       |           |     |
| OP5/MONITOR |                        |       |     |       |           |     |
| SHINKEN     | Phython                | Nag.  | yes | Mon.  | AGPL v3   | ➔   |
| THRUK       |                        |       |     |       |           |     |
| ZABBIX      | C PHP                  |       | yes |       | GPLv2     | ➔   |

- 1 Nag. - Nagios query type, including nrpe
- 2 Usage - Tool display usage as target, no warnings
- 3 Mon. - Tool monitors, give warnings

### 3 Other

- [OpenNMS](#)
- [Prometheus + Grafana](#)
- [Netdata](#)
- M/Monit
- LibreNMS

### 4 Web Interfaces

| Software | Application                  | URL               |
|----------|------------------------------|-------------------|
| Thruk    | Naemon Icinga Shinken Nagios | <a href="#">➡</a> |

### 5 Source

| Software           | Repository             |
|--------------------|------------------------|
| chekMK             | <a href="#">github</a> |
| icinga2            | <a href="#">github</a> |
| icinga2-web        | <a href="#">github</a> |
| icinga2-puppet     | <a href="#">github</a> |
| nagios4-nagioscore | <a href="#">github</a> |
| Shinken            | <a href="#">github</a> |

### 6 Conference

| Software | URL                        |
|----------|----------------------------|
| icinga   | <a href="#">icingaconf</a> |

### 7 Links

- [2015: nagios, icinga2, sensu](#)

- [2016: 9 reasons not to install Nagios](#)
- [2017-German: nagios, icinga2,...](#)

## 8 History

| Version | Date       | Notes                         |
|---------|------------|-------------------------------|
| 0.1.5   | 2021-05-19 | Formatting for Quick-Guide    |
| 0.1.4   | 2020-02-14 | comparison links              |
| 0.1.3   | 2016-07-02 | +NETSAINT to overview         |
| 0.1.2   | 2016-07-01 | +MANTIS to overview           |
| 0.1.1   | 2016-06-29 | Improve overview              |
| 0.1.0   | 2016-06-22 | Initial version with overview |

## 9 Disclaimer of Warranty

THERE IS NO WARRANTY FOR THIS INFORMATION, DOCUMENTS AND PROGRAMS, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE INFORMATION, DOCUMENT OR THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE INFORMATION, DOCUMENTS AND PROGRAMS IS WITH YOU. SHOULD THE INFORMATION, DOCUMENTS OR PROGRAMS PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

## 10 Limitation of Liability

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE INFORMATION, DOCUMENTS OR PROGRAMS AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE INFORMATION, DOCUMENTS OR PROGRAMS (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE INFORMATION, DOCUMENTS OR PROGRAMS TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.