



What's Next for Checkmk



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(Director Engineering) & Lars Michelsen (CTO)**
Checkmk



Checkmk 3.0

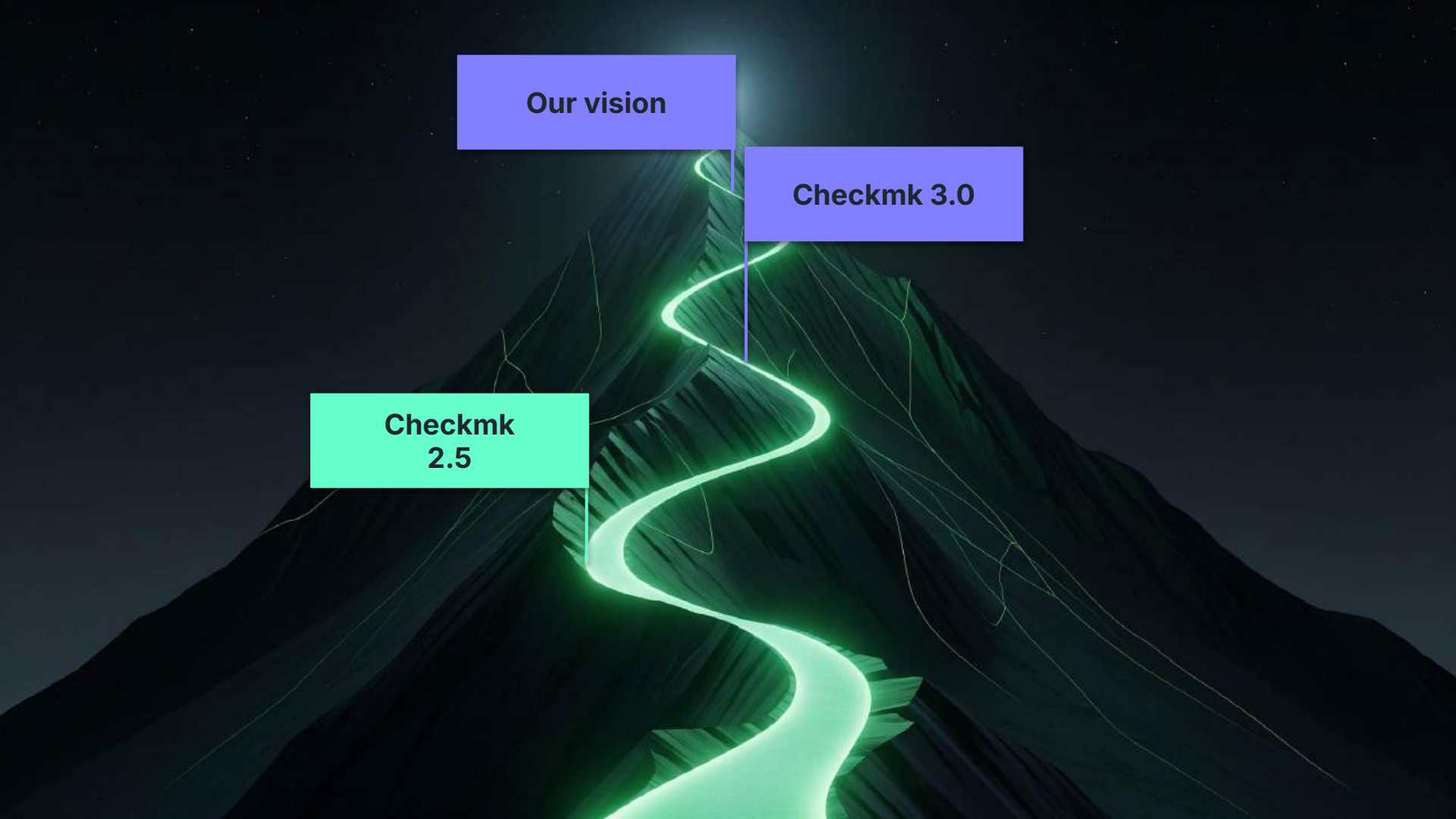
coming early 2027

**Reimagining data
analytics, visualization
and user experience**

**Advancing
full-stack
observability**

**Embedding
and enabling
AI**

Beyond 3.0



Our vision

Checkmk 3.0

**Checkmk
2.5**

Exploring hosts and services

Demo



Link to video: [here!](#)

Host overview

Search hosts...



Unhandled 29

Hosts:

DOWN 3

UNREACH 1

GROUP BY: None State Folder Label... then: None State Label...

State	Host	IP Address	Related	OK	Warn	Crit	Unkn	Pend
Main / Production / Linux (35)								
DOWN (2)								
☐	DOWN dns-primary.lan.checkmk.net	192.168.1.10	3	1	0	6	6	0
☐	DOWN web03.lan.checkmk.net	192.168.1.62	1	21	0	0	0	0
UP (33)								
☐	UP janux.lan.checkmk.net	192.168.1.42	3	70	4	5	0	0
☐	UP aix-01.demo.checkmk.com	192.168.10.50		11	1	0	0	0
☐	UP aix-02.demo.checkmk.com	192.168.10.51		53	0	0	0	0
☐	UP db01.lan.checkmk.net	192.168.1.100	1	42	0	0	0	0
☐	UP db02.lan.checkmk.net	192.168.1.101	1	13	1	0	0	0
☐	UP lb01.lan.checkmk.net	192.168.1.50	3	6	0	0	0	0

DOWN dns-primary.lan.checkmk.net
192.168.1.10

Acknowledge Downtime ...

Overview

Details

Parameters

Availability

Inventory

Host Info

OS	Linux (Ubuntu 22.04)
Agent	cmk-agent 2.3.0p24
Site	stable
Folder	Main / Production / Linux

Service Summary



LABELS

- Discovered (3)
 - os: linux site: stable agent: cmk-agent
- Explicit (2)
 - criticality: critical dns: primary
- Rule-based (1)

Reimagining visualization

All hosts

Q Search services... Filter

Unhandled 5 OK 70 WARN 4 CRIT 5 UNKN 0

By category 79 rows

State 14	Service	Summary
▼ Apache (3)		
☐ WARN	Apache 127.0.0.1:5002 Status	Uptime: 14d 2h, Busy workers: 48 (warn at 40)
☐ OK	Apache 127.0.0.1:5000 Status	Uptime: 14d 2h, Requests: 42.1/s, Busy worker:
☐ OK	Apache 127.0.0.1:5001 Status	Uptime: 14d 2h, Requests: 12.8/s, Busy worker:
▼ APT (1)		
☐ WARN	APT Updates	14 updates available (3 security)
▼ Check_MK (3)		
☐ OK	Check_MK	[agent] Success, execution time 0.3 sec
☐ OK	Check_MK Discovery	Services: all up to date, Host labels: all up to d
☐ OK	Check_MK HW/SW Inventory	Found 6585 inventory entries, Found 38 status
▼ CPU (5)		
☐ OK	CPU load	15min load: 0.72 at 8 CPUs

WARN Apache 127.0.0.1:5002 Status

Acknowledge

Downtime

...

Overview

Details

Availability

History

Parameters

Info

State	WARN
Age	5d 3h
Last checked	42s ago Reschedule
Category	Apache

Summary

WARN - Uptime: 14d 2h, Busy workers: 48 (warn at 40)

Perf-O-Meter

48

Graphs

View full graph page

Apache 127.0.0.1:5002 Status

Last 4 hours

Reimagining visualization

Services of a host

... or to finally be able to get rid of this.

Management board



This feature will be deprecated in a future version of Checkmk.

Please do not configure management boards in here anymore. Monitor the management boards via a dedicated host using [IPMI](#) or SNMP. [Read more about management boards.](#)

Protocol	☐	No management board(Default value)
Address	☐	empty(Default value)
SNMP credentials	☐	empty(Default value)
IPMI credentials	☐	empty(Default value)



checkmk



Search



Monitor



Customize



Setup



Changes

Help

Monitor > Overview > [All hosts](#)

Host overview

Search hosts...



Unhandled 29

Hosts:

DOWN 3

UNREACH 1

Concept

GROUP BY

None

State

Folder

Label... ▾

then

None

State

Label... ▾

State

Host ↑↓

IP Address

Related

OK

Warn

Crit

Unkn

Pend

☐	UP	db01.lan.checkmk.net	192.168.1.100	1	42	0	0	0	0
☐	UP	db02.lan.checkmk.net	192.168.1.101	1	13	1	0	0	0
☐	UP	de-001.checkmk.com	10.12.40.14	1	25	1	0	0	0
☐	DOWN	dns-primary.lan.checkmk.net	192.168.1.10	3	1	0	6	6	0
☐	UP	dns-secondary.lan.checkmk.net	192.168.1.			0	0	0	0
☐	UP	docker-host01.lan.checkmk.net	192.168.1.195		42	2	0	0	0
☐	UP	elastic01.lan.checkmk.net	192.168.1.160		8	1	0	0	0
☐			192.168.1.161	1	47	0	0	0	0
☐			192.168.1.170		4	0	0	0	0
☐	UP	janux.lan.checkmk.net	192.168.1.42	3	70	4	5	0	0

Relations

Reimagining visualization

Host relationships



checkmk

Monitor > Overview > [All hosts](#)

Concept

Host overview

Search hosts...



Unhandled 29

Hosts:

DOWN 3

UNREACH 1

rows



GROUP BY

None

State

Folder

Label... ▾

then

None

State

Label... ▾

State

Host ↑↓

IP Address

Related

OK

Warn

Crit

Unkn

Pend



UP

db01.lan.checkmk.net

19

RELATED HOSTS

BMC: de-001-ipmi.checkmk.com



UP

db02.lan.checkmk.net

19



UP

de-001.checkmk.com

10.12.40.14

1

25

1

0

0

0



DOWN

dns-primary.lan.checkmk.net

192.168.1.10

3

1

0

6

6

0



UP

dns-secondary.lan.checkmk.net

192.168.1.11

1

58

0

0

0

0



UP

docker-host01.lan.checkmk.net

192.168.1.195

42

2

0

0

0



UP

elastic01.lan.checkmk.net

192.168.1.160

8

1

0

0

0

192.168.1.161

1

47

0

0

0

0

192.168.1.170

4

0

0

0

0

192.168.1.42

3

70

4

5

0

0

Reimagining visualization

Host relationships

Help

Monitor > Overview > [All hosts](#)

Host overview

Search hosts...

Unhandled 29 Hosts: **DOWN 3** **UNREACH 1**

GROUP BY None State **Folder** Label... then **None** State Label...

	State	Host ↑↓	IP Address	Related
☐	UP	db01.lan.checkmk.net	192.168.1.100	1
☐	UP	db02.lan.checkmk.net	192.168.1.101	1
☐	UP	de-001.checkmk.com	10.12.40.14	1
☐	DOWN	dns-primary.lan.checkmk.net	192.168.1.10	3
☐	UP	dns-secondary.lan.checkmk.net	192.168.1.11	1
☐	UP	docker-host01.lan.checkmk.net	192.168.1.195	
☐	UP	elastic01.lan.checkmk.net	192.168.1.160	
☐	UP	lanux.lan.checkmk.net	192.168.1.42	3

UP de-001.checkmk.com
10.12.40.14

LABELS

Discovered (7)

- cmk/os_family: **linux** | cmk/os_type: **linux**
- cmk/os_platform: **rhel**
- cmk/os_name: **Red Hat Enterprise Linux 9.3**
- cmk/os_version: **9.3** | cmk/agent_transport: **pull-agent**
- cmk/site: **stable**

Explicit (2)

- criticality: **prod** | team: **platform**

Rule-based (2)

- networking: **lan** | dc: **eu-west-1**

RELATED HOSTS

UP de-001-ipmi.checkmk.com
BMC

Reimagining visualization
Host relationships



checkmk



Search



Monitor



Customize



Setup



Changes



Help

Monitor > All hosts > Services of de-001-ipmi.checkmk.com

UP

de-001-ipmi.checkmk.com

10.12.40.13

DE 001 IPMI

1

Concept

Search services...

Filter

No grouping

20 rows

☐	State	Service ↕	Summary	Age	Checked	Perf-O-Meter
☐	OK		Check_MK [special_ipmi_sensors] Success, [sp...	5d 3h	18s ago	5 s
☐	OK		Check_MK Discovery Services: all up to date, Host labels: ...	5d 3h	4m ago	40 ms
☐	OK		Check_MK HW/SW Inventory Found 97 inventory entries, executio...	5d 3h	32m ago	0.64 s
☐	OK		CPU 1 Type: CPU, Model: AMD EPYC 7402...	5d 3h	42s ago	
☐	OK		Firmware health All firmware in optimal state	5d 3h	42s ago	
☐	OK		Memory 1 Size: 64GB, Type: DDR4-3200 Multi...	5d 3h	42s ago	
☐	OK		Memory 2 Size: 64GB, Type: DDR4-3200 Multi...	5d 3h	42s ago	
☐	OK		Memory 3 Size: 64GB, Type: DDR4-3200 Multi...	5d 3h	42s ago	
☐	OK		Memory 4 Size: 64GB, Type: DDR4-3200 Multi...	5d 3h	42s ago	
☐	OK		Memory 5 Size: 256GB, with State: Compo...	5d 3h	42s ago	
☐	OK		Memory 6 Information found	5d 3h	42s ago	
☐	OK		Physical port 1 Link: LinkDown, Speed: Unknown, M...	5d 3h	42s ago	
☐	OK		Physical port 2 Link: LinkDown, Speed: Unknown, M...	5d 3h	42s ago	

Reimagining visualization

Host relationships



checkmk



Search



Monitor



Customize



Setup



Changes

Help

Monitor > All hosts > Services of de-001-ipmi.checkmk.com

Concept

UP de-001-ipmi.checkmk.com 10.12.40.13 DE 001 IPMI 1

Search services...

Unhandled 0

OK 20

WARN 0

CRIT 0

RELATED HOSTS

Base host: de-001.checkmk.com

No grouping

20 rows

☐	State	Service ↕	Summary	Age	Checked	Perf-O-Meter
☐	OK		Check_MK [special_ipmi_sensors] Success, [sp...	5d 3h	18s ago	5 s
☐	OK		Check_MK Discovery Services: all up to date, Host labels: ...	5d 3h	4m ago	40 ms
☐	OK		Check_MK HW/SW Inventory Found 97 inventory entries, executio...	5d 3h	32m ago	0.64 s
☐	OK		CPU 1 Type: CPU, Model: AMD EPYC 7402...	5d 3h	42s ago	
☐	OK		Firmware health All firmware in optimal state	5d 3h	42s ago	
☐	OK		Memory 1 Size: 64GB, Type: DDR4-3200 Multi...	5d 3h	42s ago	
☐	OK		Memory 2 Size: 64GB, Type: DDR4-3200 Multi...	5d 3h	42s ago	
☐	OK		Memory 3 Size: 64GB, Type: DDR4-3200 Multi...	5d 3h	42s ago	
☐	OK		Memory 4 Size: 64GB, Type: DDR4-3200 Multi...	5d 3h	42s ago	
☐	OK		Memory 5; 256GB, with State: Compo...	5d 3h	42s ago	
☐	OK		Memory 6 Information found	5d 3h	42s ago	
☐	OK		Physical port 1 Link: LinkDown, Speed: Unknown, M...	5d 3h	42s ago	
☐	OK		Physical port 2 Link: LinkDown, Speed: Unknown, M...	5d 3h	42s ago	

Reimagining visualization

Host relationships



checkmk



Search



Monitor



Customize



Setup



Changes

Help

Monitor > All hosts > Services of de-001-ipmi.checkmk.com

Concept

UP de-001-ipmi.checkmk.com 10.12.40.13 DE 001 IPMI 1

Search services...

Unhandled 0

OK 20

WARN 0

CRIT 0

RELATED HOSTS

Base host: [de-001.checkmk.com](#)

No grouping

20 rows

☐	State	Service ↕	Summary	Age	Checked	Perf-O-Meter
☐	OK		Check_MK [special_ipmi_sensors] Success, [sp...	5d 3h	18s ago	5 s
☐	OK		Check_MK Discovery Services: all up to date, Host labels: ...	5d 3h	4m ago	40 ms
☐	OK		Check_MK HW/SW Inventory Found 97 inventory entries, executio...	5d 3h	32m ago	0.64 s
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☐	OK		Memory 3 Size: 64GB, Type: DDR4-3200 Multi...	5d 3h	42s ago	
☐	OK		Memory 4 Size: 64GB, Type: DDR4-3200 Multi...	5d 3h	42s ago	
☐	OK		Memory 5; 256GB, with State: Compo...	5d 3h	42s ago	
☐	OK		Information found	5d 3h	42s ago	
☐	OK		Physical port 1 Link: LinkDown, Speed: Unknown, M...	5d 3h	42s ago	
☐	OK		Physical port 2 Link: LinkDown, Speed: Unknown, M...	5d 3h	42s ago	

Reimagining visualization

Host relationships

Host overview

Search hosts...



Unhandled 29

Hosts:

DOWN 3

UNREACH 1

Services:

Impact paths

Hide unrelated

network

service dep



DOWN



UNREACH



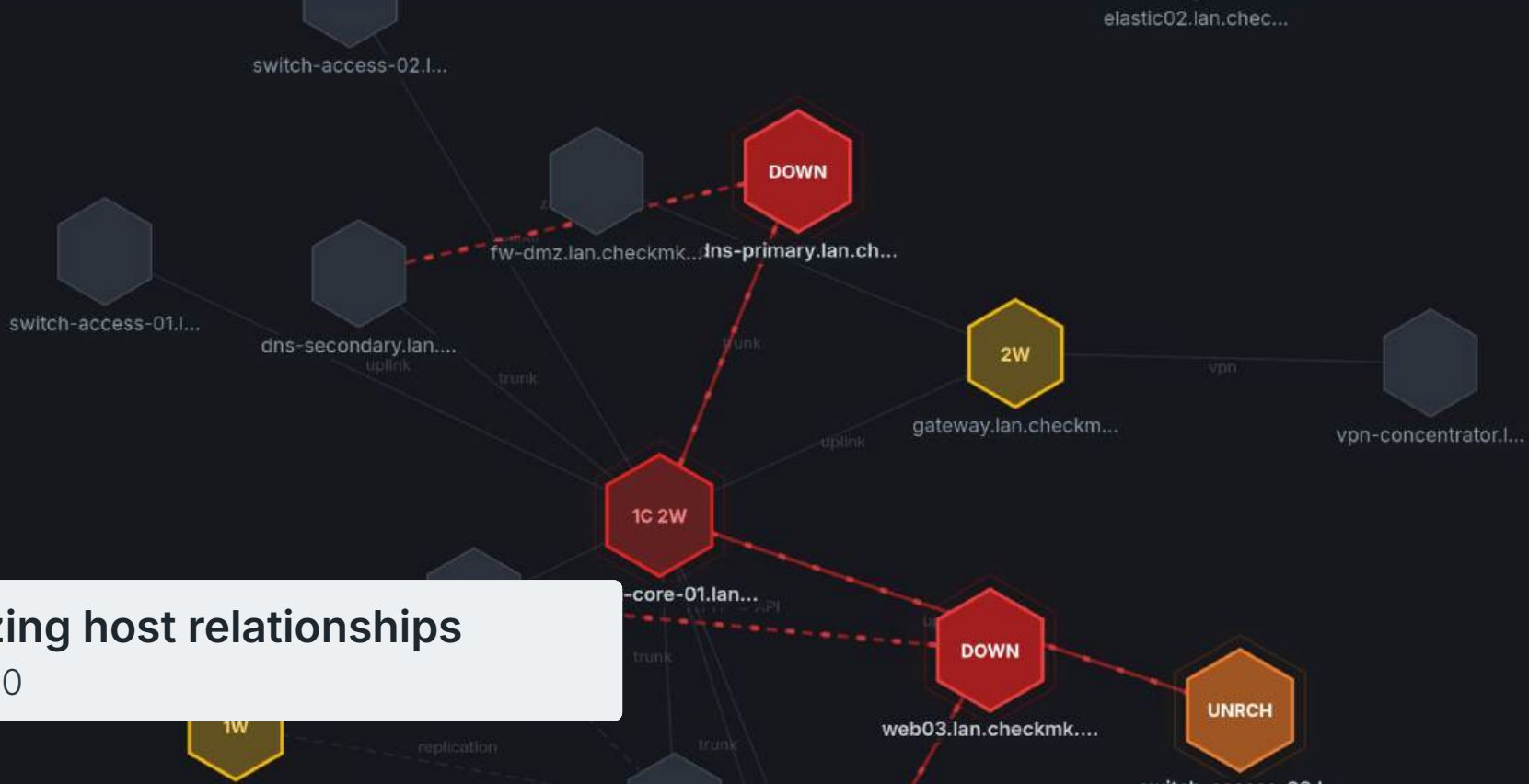
CRIT



WARN



OK



Visualizing host relationships

Beyond 3.0

A well-paced evolution.



Our focus for 3.0

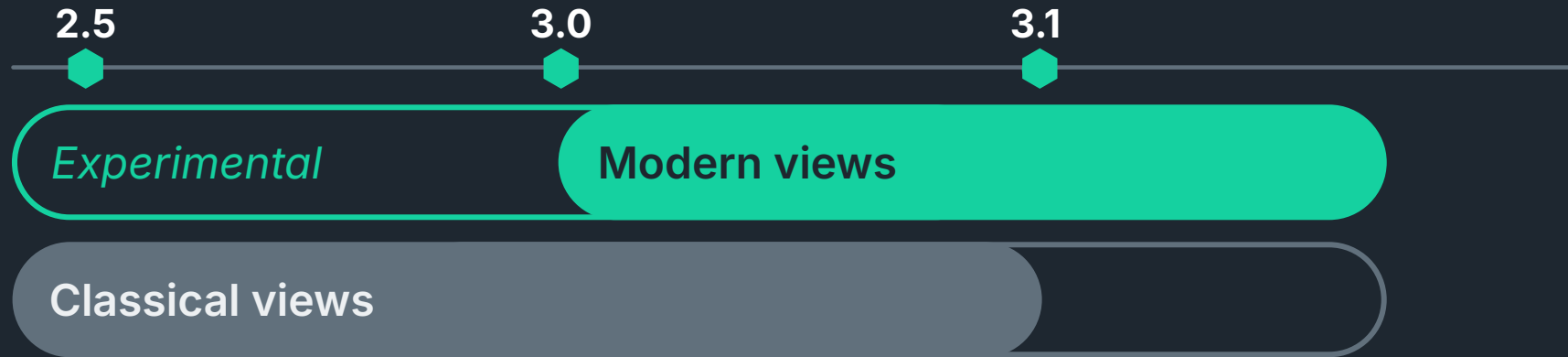
- The most important views
- Great out-of-the-box experience



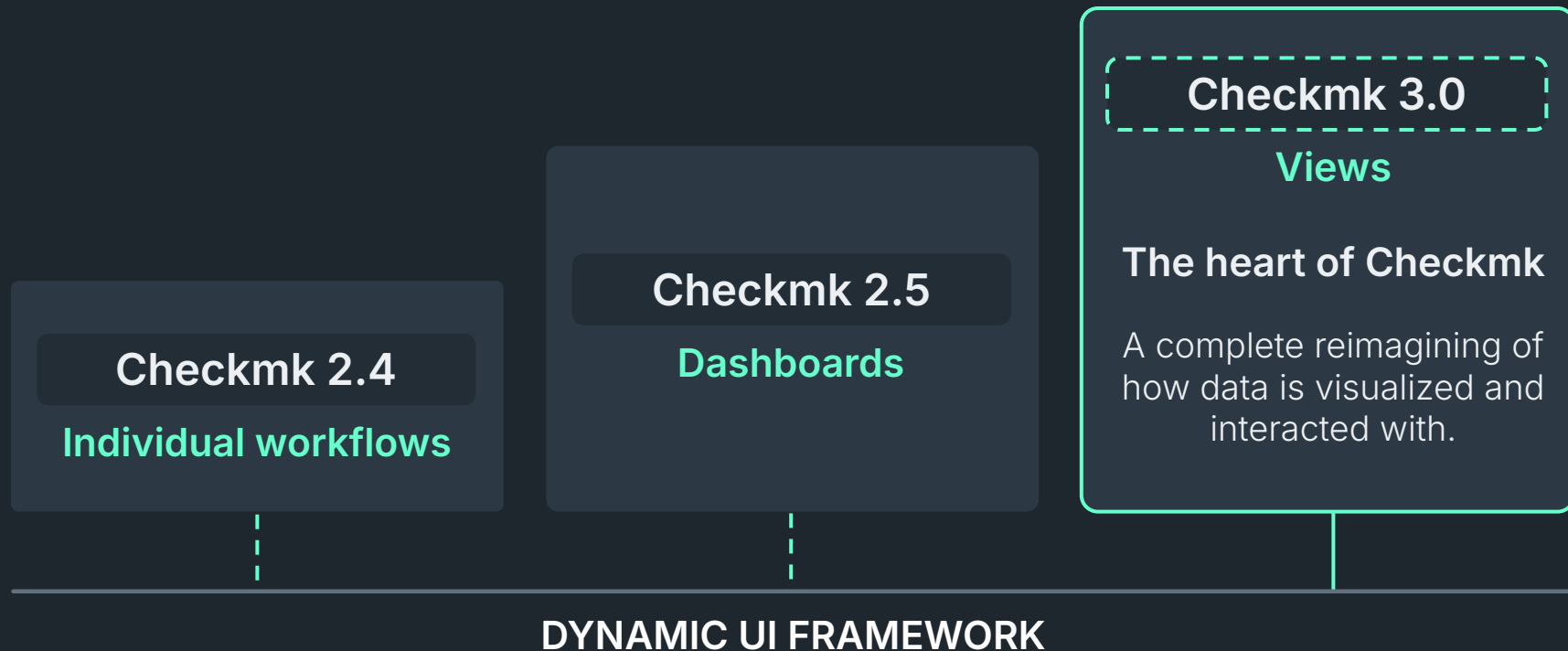
Limitations

- Only two views out of many
- No build-your-own view option

A well-paced evolution. Going beyond 3.0



Accelerating improvements in the Checkmk UI





Great dashboards need...

... to be easy to build and edit



Great dashboards need...

... great views



Great dashboards need...

... great graphs

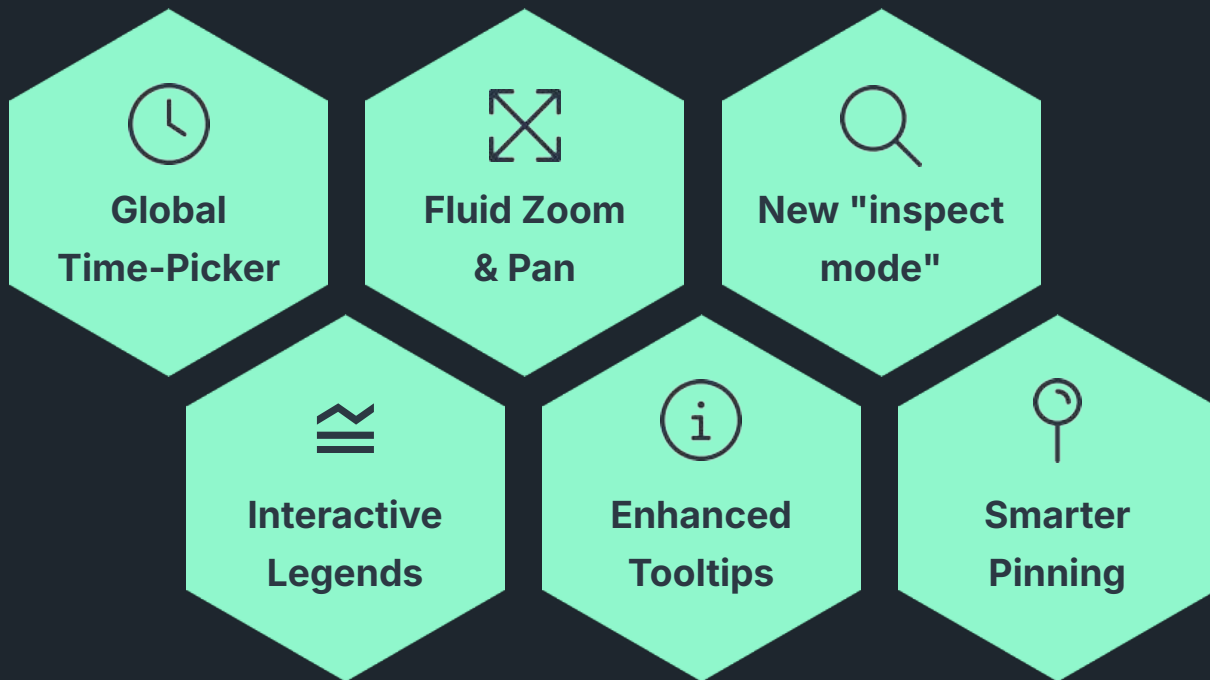
State-of-the-art graphing

Demo



Link to video: [here!](#)

State-of-the-art graphing coming to Checkmk!



Great dashboards need...

27

votes

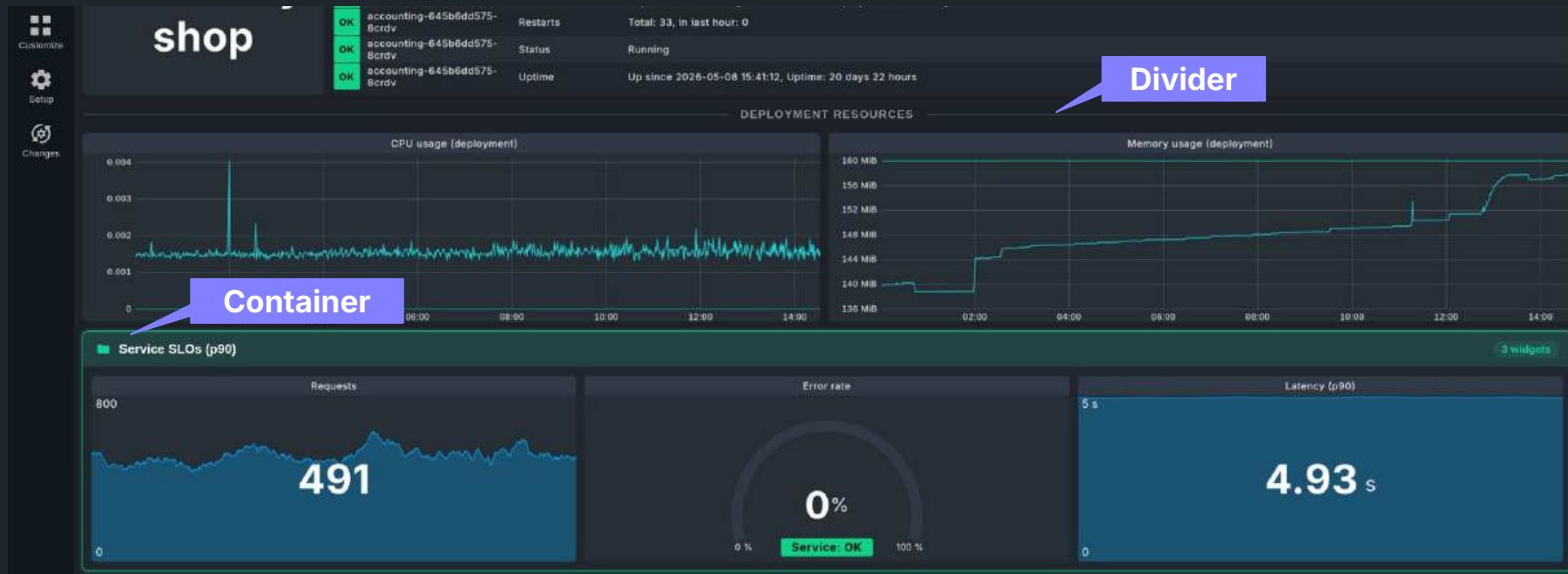
Dashboard Separator Bar / Divider / Line / Formatting options etc.

Ability to add a simple bar or division to emphasize the separation of dashboard elements. It would be great when formatting headlines could have more options ...

Suggested by: [opensourcefan](#) (06 Dec, '22) • Upvoted: 17 Apr • [Comments: 2](#)

[📌 Pin this](#)[Under consideration](#)[#Dashboards & Visualizations](#)

Make-up for dashboards: new widgets



Formatting options
for **Static text**





Deployment

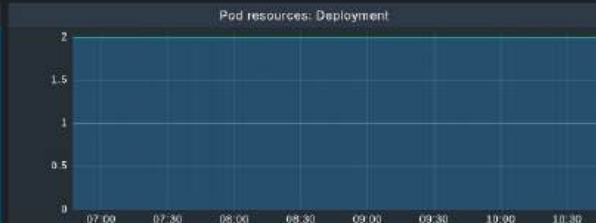
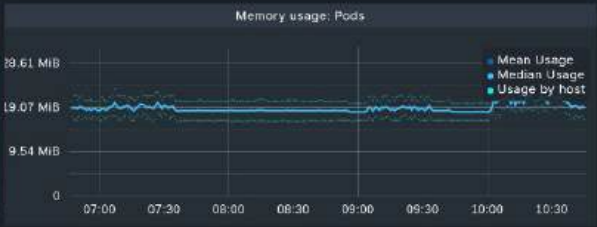
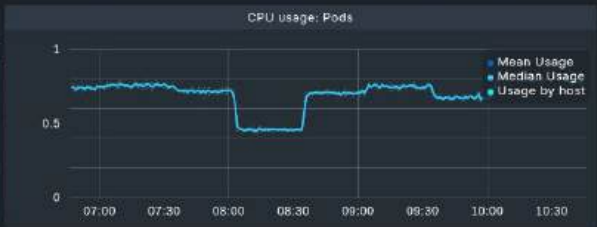
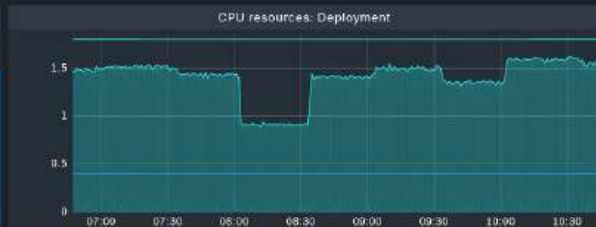
php-apache

Namespace

blog

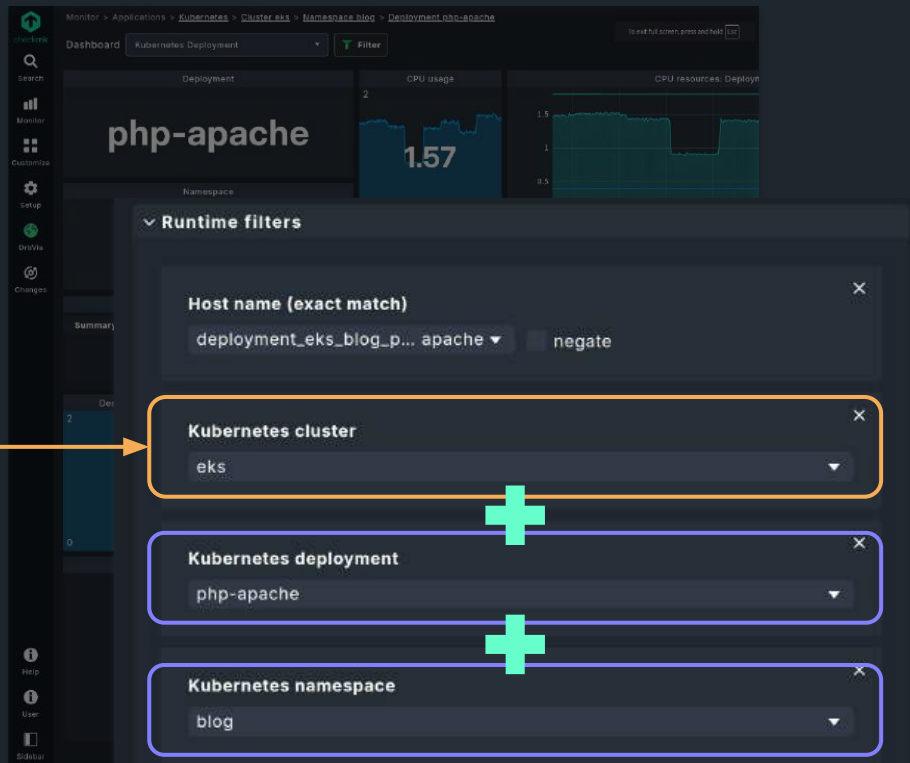
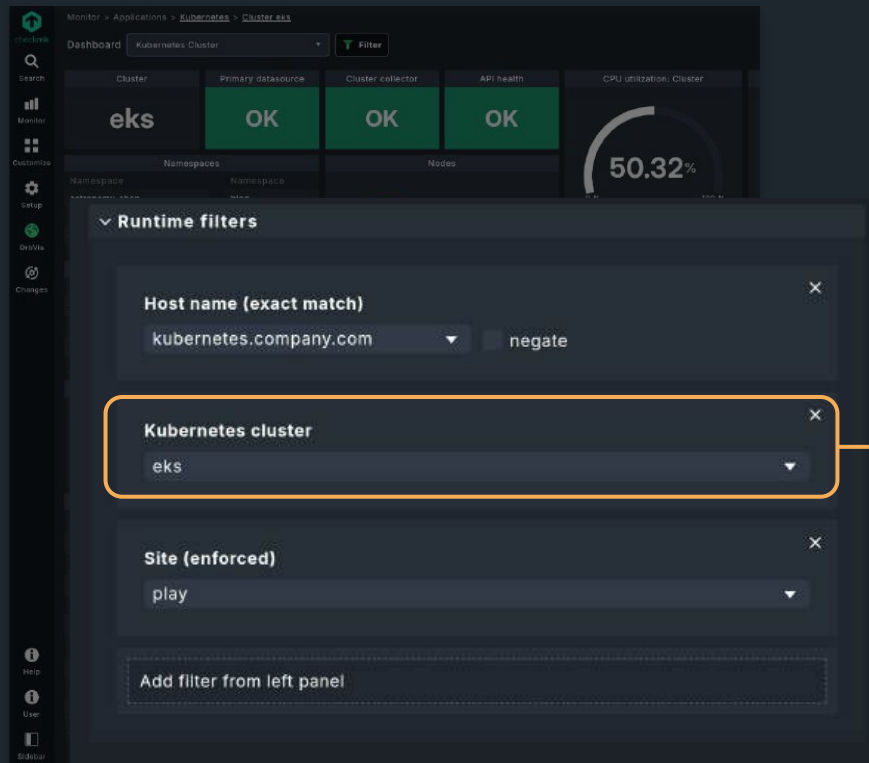
Condition

Summary All conditions OK



Deployment problems				
State	Object	Name	Service	Summary

Drill-down dashboards work by setting filters



... unfortunately out-of-the-box linking is limited

Multiple link options. But the filter is always 'hostname'

Column ▾

Column (required)

Hosts: Host name ▾

Coloring

- ☐ Colorize background if host is up
- ☐ Colorize background if host is down
- ☐ Colorize background if host unreachable
- ☐ Colorize background if host is pending
- ☐ Colorize background if host is downtime

Title

✕ Link

Link to view: ▾ Services - Services of host (host) ▾

☐ Tooltip

Column ▾

Column (required)

Hosts: Host name ▾

Coloring

- ☐ Colorize background if host is up
- ☐ Colorize background if host is down
- ☐ Colorize background if host unreachable
- ☐ Colorize background if host is pending
- ☐ Colorize background if host is downtime

Title

✕ Link

Link to dashboard: ▾ Single Linux host ▾

☐ Tooltip

Custom code required to build proper drill-down dashboards

Build your own drill-down dashboards!



Title

× Link

Set filters on linked view

Host name (regex)	=	^.?checkmk\.com\$	×
Host is in Group	=	Hetzner	×
Host labels	=	cmk/os_family:linux	×

☐ Tooltip

One more thing ;-)



273
votes

Give NagVis a proper facelift

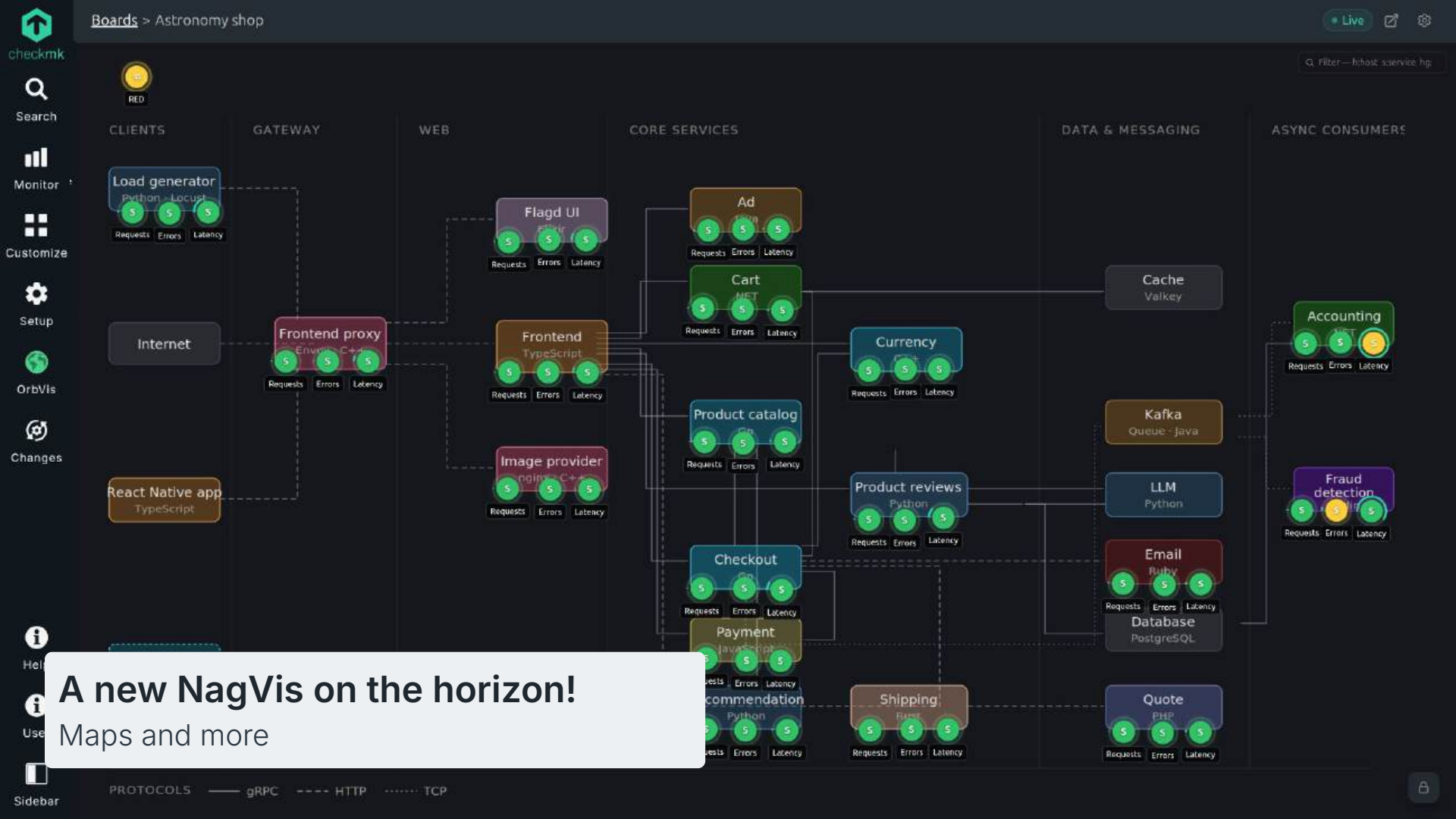
NagVis is used by many people/customers. It's a crucial part of Checkmk and it really feels dated and old. NagVis needs some love and more features and a more modern ...

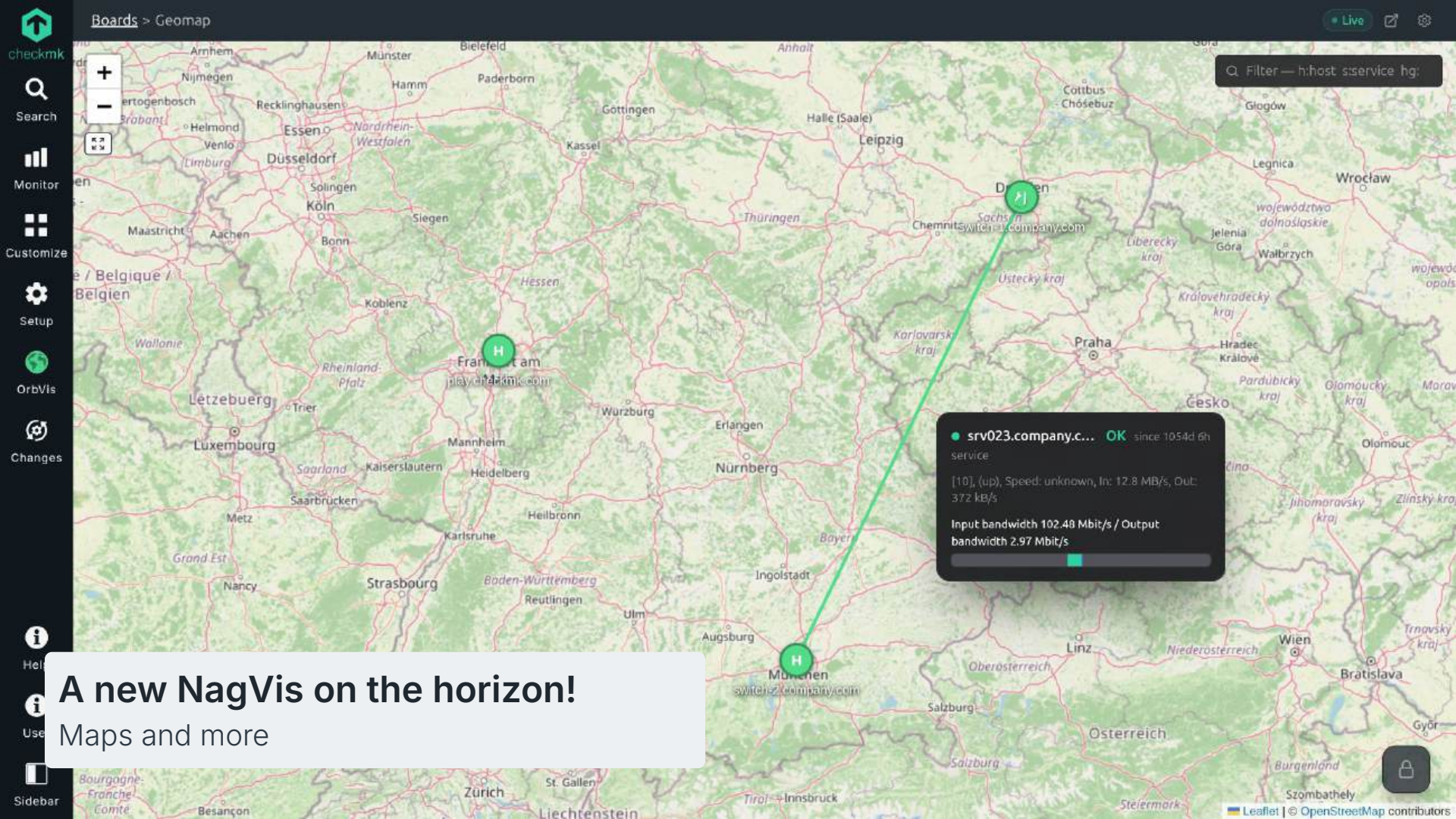
Suggested by: [Norman Kühnberger](#) (04 May, '22) • Upvoted: 08 May • [Comments: 8](#)

📌 Pin this

Under consideration

#Dashboards & Visualizations





A new NagVis on the horizon!

Maps and more

The next NagVis – started as hobby project of Ronny

To iterate and build quickly



The next NagVis – started as hobby project of Ronny

To iterate and build quickly



civitec Anwendung

Stand 20.05.2015

Oracle-Rac

Node1

ApplicationLayer-Web

orbvis / **orbvis**

Code Issues Pull requests Agents Actions Projects Security and quality Insights

orbvis Public

Watch 0 Fork 0 Star 7

main

Go to file + Code

rb	Fix: board canvas: pin extents at board-load s...	0fd5468 · 6 hours ago
.github	ci: backend: scope cmk-plugin-ap...	3 days ago
backend	Fix: livestatus: import LivestatusR...	yesterday
cmk_plugins	version: bump to 0.3.0	2 days ago
cmk_plugins_23	install: move bridge plugins to lo...	4 days ago

About

OrbVis - Monitoring Visualization

<https://play.checkmk.com>

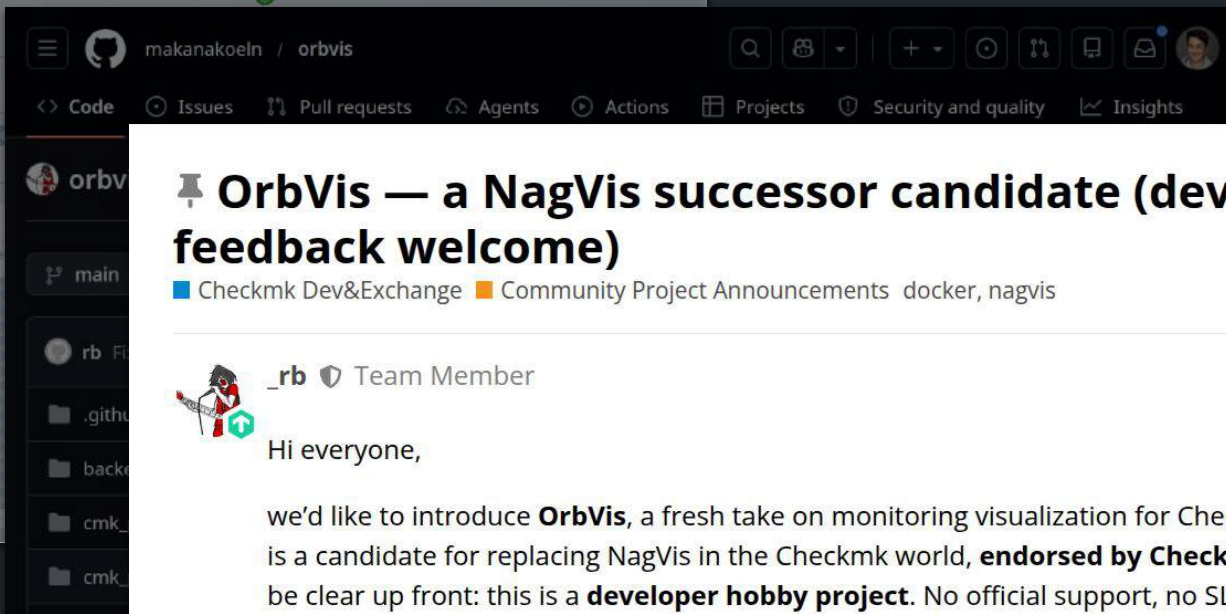
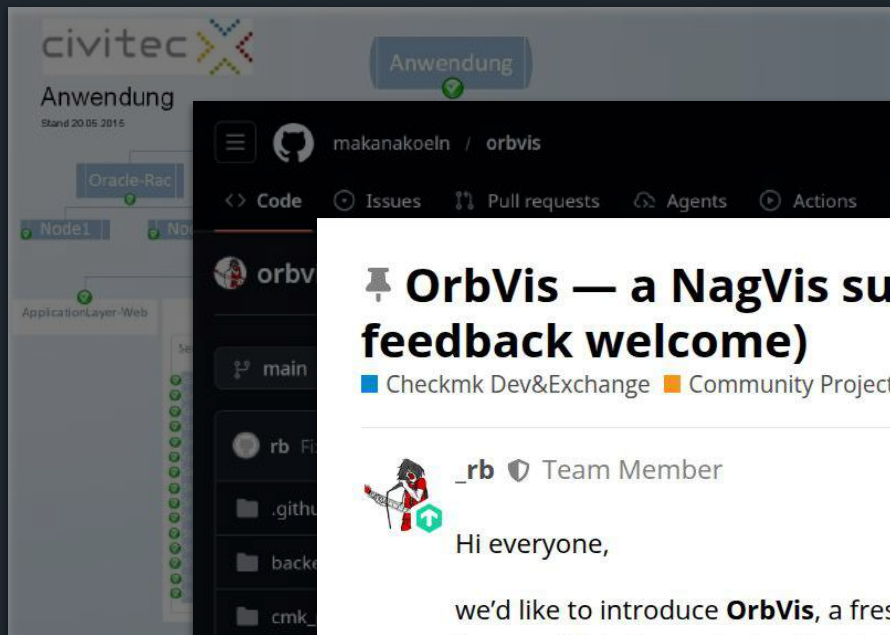
visualization monitoring vue livestatus checkmk nagvis fastapi

Readme

GPL-2.0 license

The next NagVis – started as hobby project of Ronny

To iterate and build quickly



📌 OrbVis — a NagVis successor candidate (developer preview, feedback welcome)

■ Checkmk Dev&Exchange ■ Community Project Announcements docker, nagvis



_rb Team Member

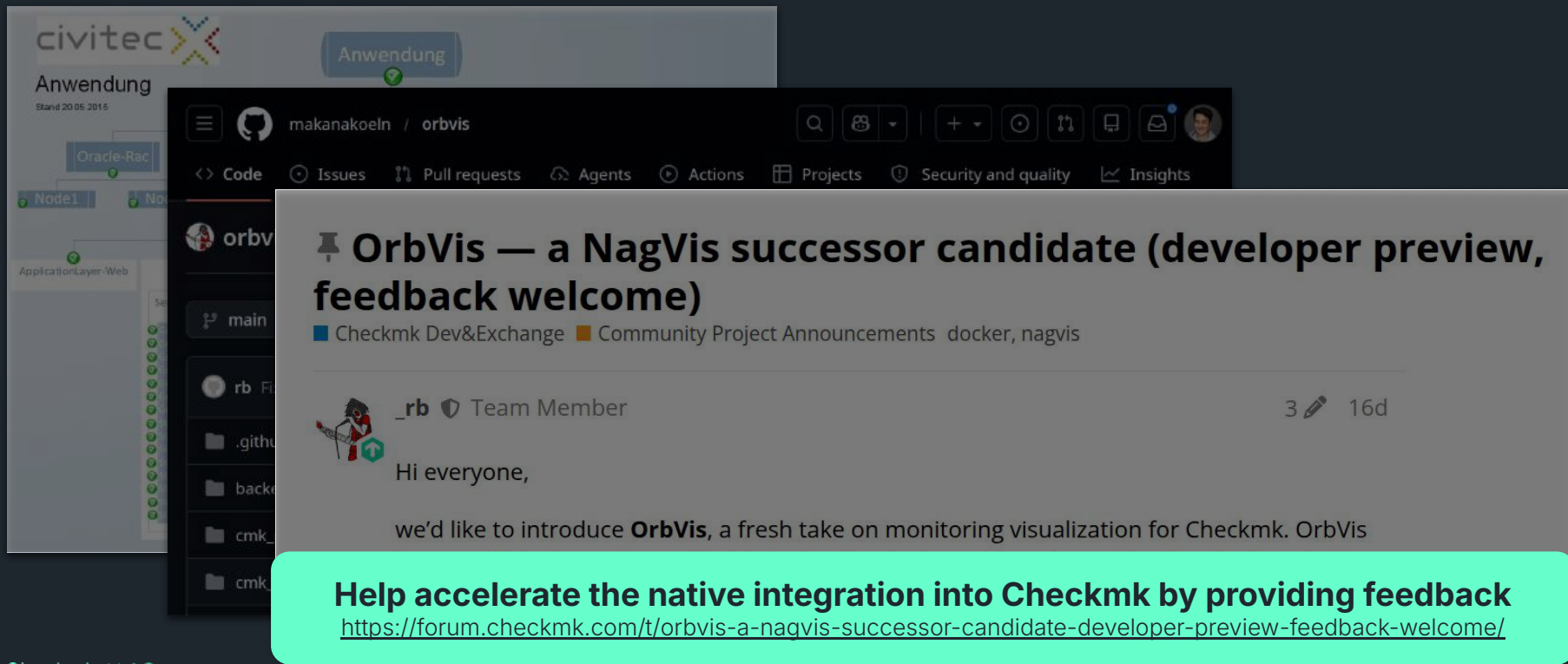
3 16d

Hi everyone,

we'd like to introduce **OrbVis**, a fresh take on monitoring visualization for Checkmk. OrbVis is a candidate for replacing NagVis in the Checkmk world, **endorsed by Checkmk** — but to be clear up front: this is a **developer hobby project**. No official support, no SLA, no release timeline. The code is open and we want you to try it.

The next NagVis – started as hobby project of Ronny

To iterate and build quickly



OrbVis — a NagVis successor candidate (developer preview, feedback welcome)

■ Checkmk Dev&Exchange ■ Community Project Announcements docker, nagvis

_rb Team Member 3 16d

Hi everyone,

we'd like to introduce **OrbVis**, a fresh take on monitoring visualization for Checkmk. OrbVis

Help accelerate the native integration into Checkmk by providing feedback

<https://forum.checkmk.com/t/orbvis-a-nagvis-successor-candidate-developer-preview-feedback-welcome/>

Reimagining analytics, visualization and UX



Making Checkmk's intelligence actionable for faster issue resolution

**Reimagining
analytics,
visualization
& UX**

**Advancing full-stack
observability**

**Embedding
and enabling
AI**

Beyond 3.0

Applications



Data



Runtime



Middleware

O/S

Virtualization



Servers

Storage

Networking





We are here to help you on the journey to full-stack visibility





Our vision

Checkmk 3.0

**Checkmk
2.5**

Applications

Data

Runtime

Middleware

O/S

Virtualization

Servers

Storage

Networking



Services of host switch-eg

Commands Host Services Export Display Help



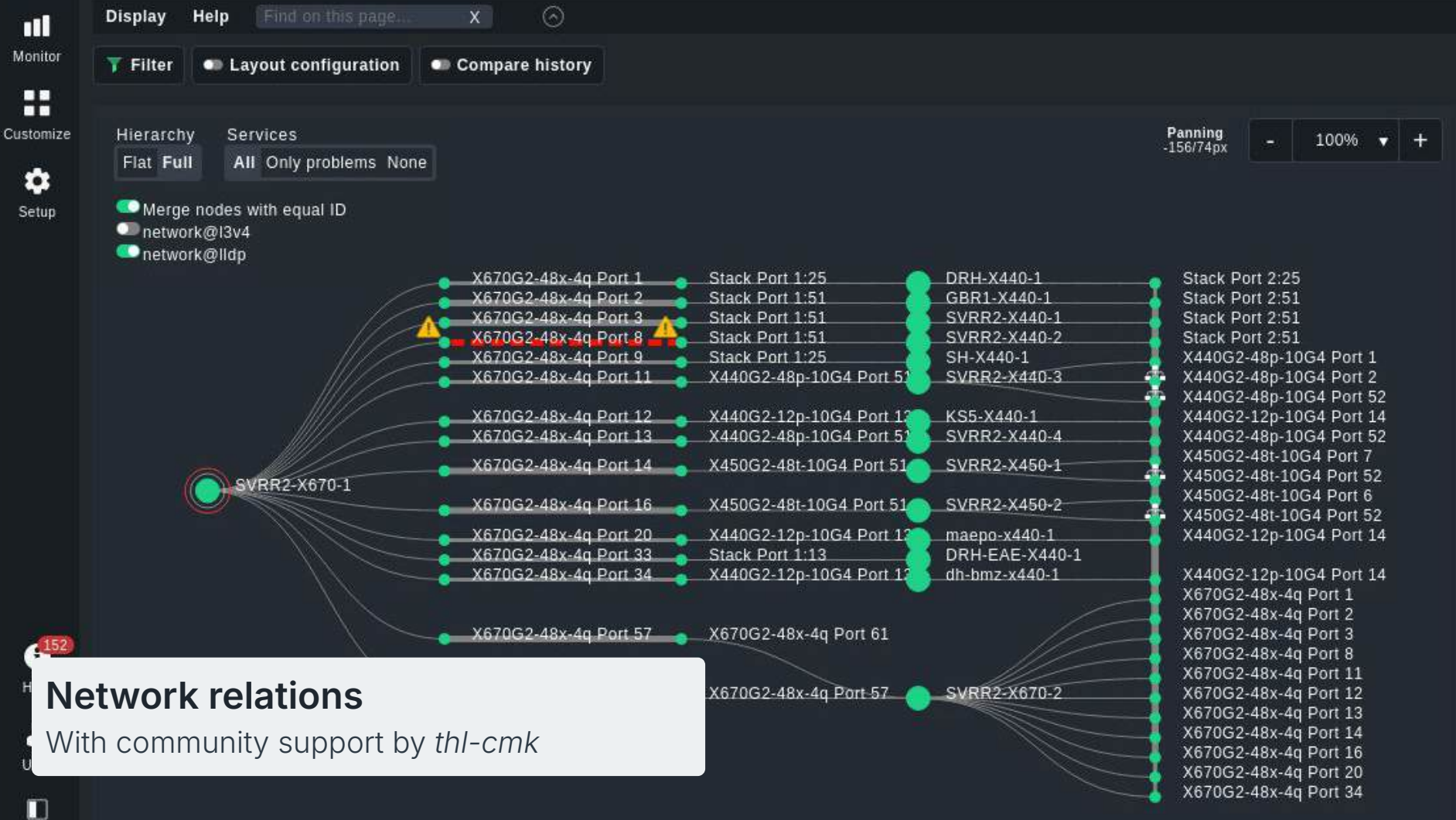
32 rows

switch-eg

State	Service	Icons	Summary	Age	Checked	Perf-O-Meter
OK	Check_MK		[snmp] Success, [piggyback] Success (but no data found for this host), execution time 11.8 sec	35 m	21.7 s	11.77 s
OK	Check_MK Discovery		Services changed: 1 (interfaces: 1), Host labels: all up to date, execution time 18.3 sec	2026-03-03 13:59:47	6 m	18.3 s
OK	Check_MK HW/SW Inventory		Found 235 inventory entries, networking changes, Found 34 status entries, execution time 6.1 sec	2026-02-06 12:14:29	6 h	6.08 s
OK	CPU utilization		Total CPU: 10.00%	2026-02-06 12:14:08	21.7 s	10 %
OK	Interface gigabitEthernet 1/0/1		[49153], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
OK	Interface gigabitEthernet 1/0/2		[49154], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
OK	Interface gigabitEthernet 1/0/3		[eg_repeater], (up), MAC: 98:BA:5F:CE:E2:0A, Speed: 1 GBit/s, In: 27.2 B/s (<0.01%), Out: 574 B/s (<0.01%)	2026-02-06 12:23:21	21.7 s	217.52 bit/s / 4.59 kbit/s
OK	Interface gigabitEthernet 1/0/4		[1-ogrepeater2400], (up), MAC: 98:BA:5F:CE:E2:0A, Speed: 1 GBit/s, In: 1.05 kB/s (<0.01%), Out: 1.70 kB/s (<0.01%)	2026-02-27 08:16:50	21.7 s	8.42 kbit/s / 13.63 kbit/s
OK	Interface gigabitEthernet 1/0/5		[49157], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
OK	Interface gigabitEthernet 1/0/6		[49158], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
OK	Interface gigabitEthernet 1/0/7		[49159], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
OK	Interface gigabitEthernet 1/0/8		[49160], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
OK	Interface gigabitEthernet 1/0/9		[49161], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
OK	Interface gigabitEthernet 1/0/10		[49162], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
OK	Interface gigabitEthernet 1/0/11		[ug_fritzbox], (up), MAC: 98:BA:5F:CE:E2:0A, Speed: 1 GBit/s, In: 125 kB/s (0.10%), Out: 22.5 kB/s (0.02%)	2026-04-05 11:02:47	21.7 s	996.07 kbit/s / 179.9 kbit/s
OK	Interface gigabitEthernet 1/0/12		[49164], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/13		[49165], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/14		[49166], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/15		[49167], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/16		[49168], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/17		[49169], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/18		[49170], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/19		[49171], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/20		[49172], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/21		[49173], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/22		[49174], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/23		[49175], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/24		[49176], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/25		[49177], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/26		[49178], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/27		[49179], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/28		[49180], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/29		[49181], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/30		[49182], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface gigabitEthernet 1/0/31		[49183], (down), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown	2026-02-06 12:23:21	21.7 s	
	Interface Vlan-Interface1		[1], (up), MAC: 98:BA:5F:CE:E2:0A, Speed: unknown, In: 206 B/s, Out: 606 B/s	2026-03-12 08:02:22	21.7 s	1.65 kbit/s / 4.84 kbit/s
	Memory		Utilization: 43.00%	2026-02-06 12:14:08	21.7 s	43 %

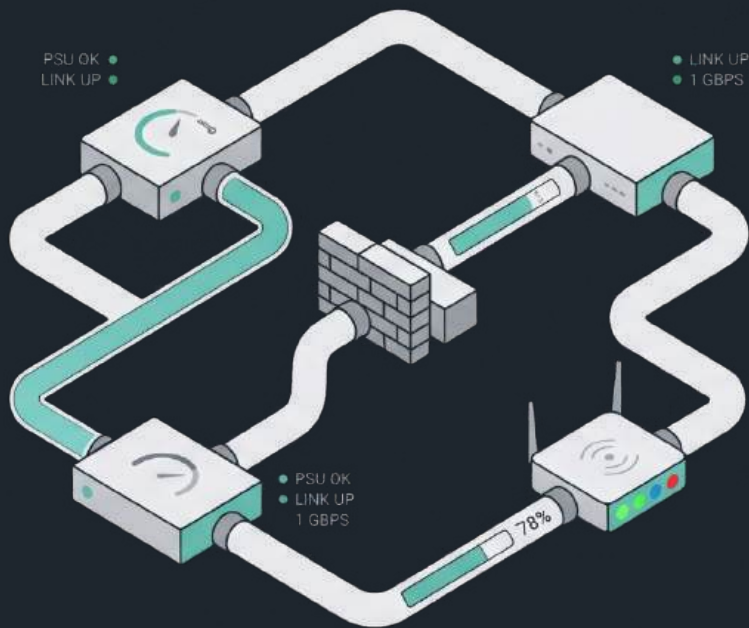
Network health & performance

Status quo

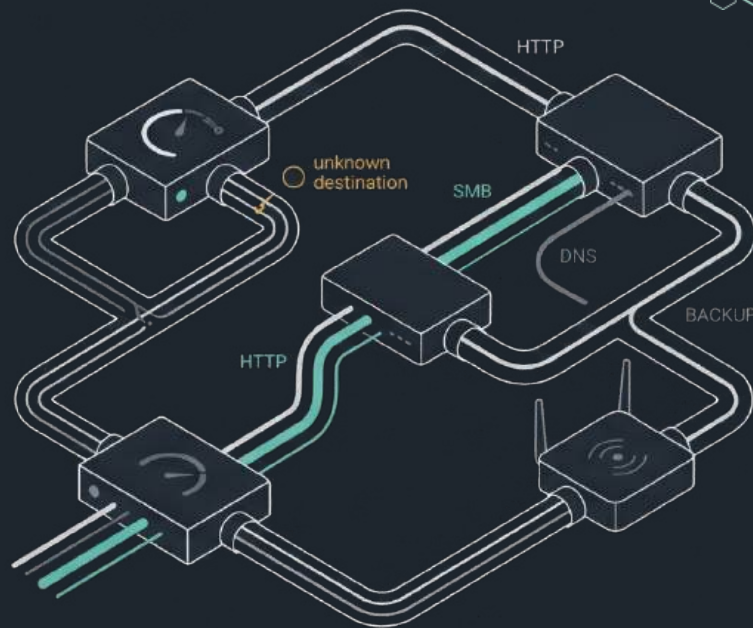


Network relations

With community support by *thl-cmk*



COMPLEMENTARY, NOT COMPETING



✓ Infrastructure health & utilization

⌄ Who, with whom, about what

Introducing Network Flow Monitoring with Checkmk

X-ray into your network

Demo



Link to video: [here!](#)

Network Performance Monitoring

Our vision



Powerful analytics

Fast real-time analysis

Top-talkers, current flows etc.

Historical analysis

Efficient long-term storage



Insight enriched

Enrichment

GeoIP, ASN, and DNS hostname normalization.

Deep packet inspection

Identifying 300+ protocols (Teams, YouTube).



Threat detection

Behavioural

Detect 10x volume spikes, new destinations & beaconing.

Built-in Alert Library

Including security checks

Applications

Data

Runtime

Middleware

O/S

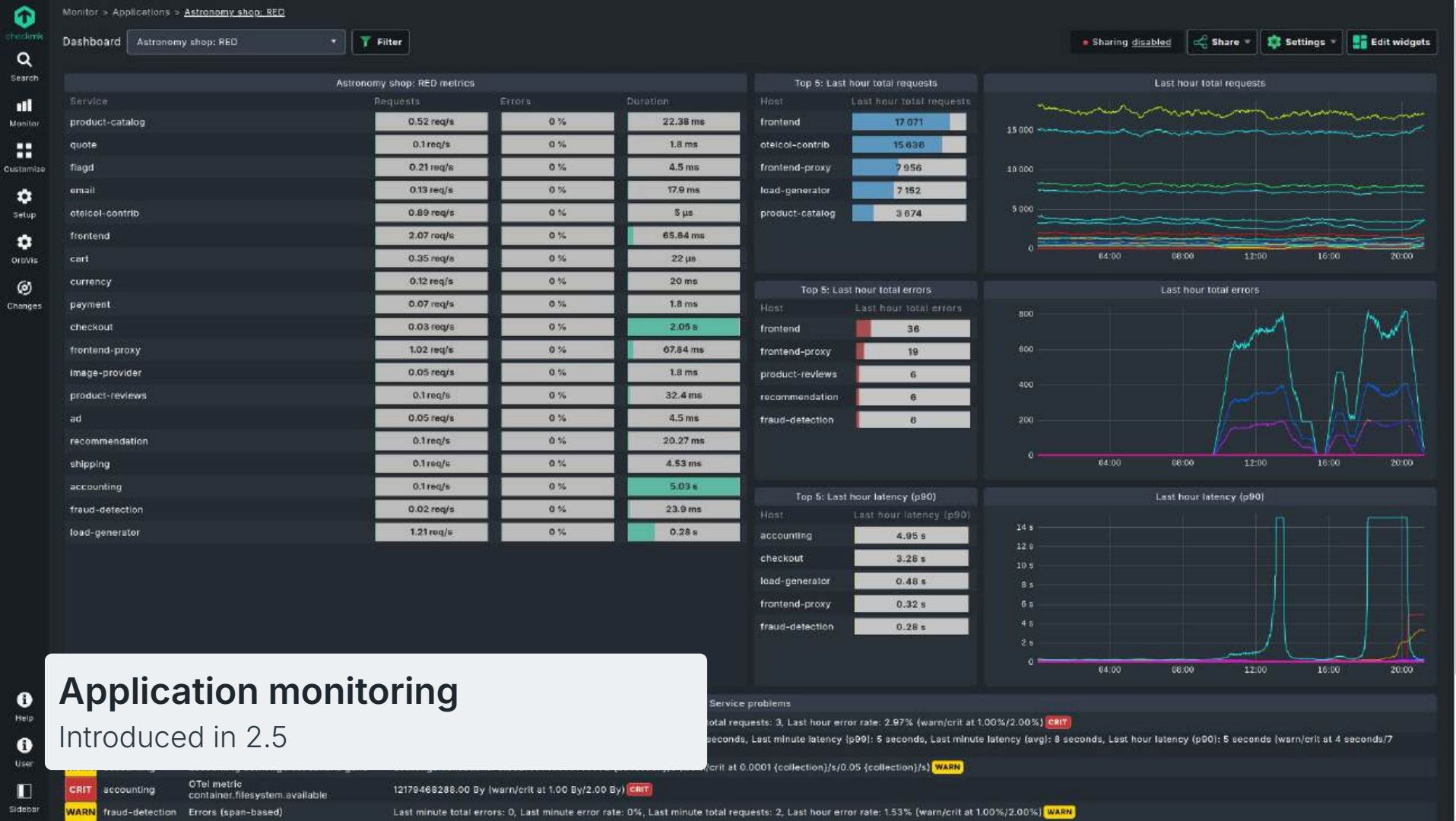
Virtualization

Servers

Storage

Networking





Extending the foundation for Application Monitoring



Next: More capabilities + better integration into Checkmk

Open Standards

Generic ingestion via OpenTelemetry
and Prometheus

Power & Speed

A high-performance backend built
for scale

START

05/24/2026, 04:44 PM

END

05/24/2026, 05:44 PM

QUICK RANGE

Last 1 hour

app.frontend.requests

20 series



[a	method=GET,	status=200,	target=/api/products/9SI...	0.01333-0.06	(65/66 pts)
[a	method=POST	status=200	target=/api/checkout	0-0.01333	(65/66 pts)
[a	method=GET,	status=200,	target=/api/products	0.03667-0.1667	(65/66 pts)
[a	method=GET,	status=200,	target=/api/products/0PU...	6.67e-3-0.05333	(65/66 pts)
[a	method=GET,	status=200,	target=/api/cart	0.00667-0.35	(65/66 pts)
[a	method=GET,	status=200,	target=/api/products/66V...	6.67e-3-0.06	(65/66 pts)
[a	method=GET,	status=500,	target=/api/recommendati...	0-0.02	(65/66 pts)
[a	method=GET,	status=200,	target=/api/recommendati...	0.04667-0.21	(65/66 pts)
[a	method=GET,	status=200,	target=/api/currency	6.67e-3-0.1333	(65/66 pts)
[a	method=GET,	status=200,	target=/api/products/6E9...	0-0.00667	(65/66 pts)
[a	method=GET,	status=500,	target=/api/currency	0-1.717	(65/66 pts)
[a	method=POST	status=500	target=/api/checkout	0-0.3167	(65/66 pts)

Graph lines (OpenTelemetry)

app.frontend.requests where + rate · 5m x

no grouping +

+ then

metric name where + rate · 5m

Query

no grouping +

START

05/24/2026, 04:44 PM



END

05/24/2026, 05:44 PM



QUICK RANGE

Last 1 hour



app.frontend.requests

1 series ⓘ



— [a] sum 0.31-3.273 (65/66 pts)

▼ Graph lines (OpenTelemetry)

a app.frontend.requests where +

rate · 5m x

sum by everything +

Aggregations

where +

rate · 5m

Query

no grouping +

Add

Formula

e.g. a + b

Add

START 05/24/2026, 04:44 PM

END 05/24/2026, 05:44 PM

QUICK RANGE Last 1 hour

app.frontend.requests

2 series



Graph lines (OpenTelemetry)

app.frontend.requests

where +

rate · 5m

sum by [Data point] status × +

Aggregations

Query

no grouping +

Add

Formula

e.g. a + b

Add



checkmk



Search



Monitor



Customize



Setup



Changes



Help



User



Sidebar

Customize / Custom graphs - Design graph 'custom_graph_1'

POC

Concept

START

05/24/2026, 04:44 PM



END

05/24/2026, 05:44 PM



QUICK RANGE

Last 1 hour



system.cpu.utilization

48 series ⓘ



[a] cpu=2, state=irq 0-0 (65/66 pts)
[a] cpu=1, state=system 0.087-0.182 (65/66 pts)
[a] cpu=3, state=irq 0-0 (65/66 pts)
[a] cpu=2, state=user 0.092-0.156 (65/66 pts)
[a] cpu=1, state=user 0.09-0.165 (65/66 pts)
[a] cpu=7, state=irq 0-0 (65/66 pts)
[a] cpu=5, state=system 0.066-0.175 (65/66 pts)
[a] cpu=8, state=irq 0-0 (65/66 pts)
[a] cpu=7, state=system 0.088-0.178 (65/66 pts)
[a] cpu=5, state=irq 0-0 (65/66 pts)
[a] cpu=8, state=irq 0-0 (65/66 pts)
[a] cpu=5, state=user 0.088-0.149 (65/66 pts)

▼ Graph lines (OpenTelemetry)

[a] system.cpu.utilization where [Data point] state is not idle x +

last value x

no grouping v +

+ then

metric name

where +

rate · 5m

Query

no grouping v +

DEV </> Dev Tools Results SQL Connection Settings

START 05/24/2026, 04:44 PM

END 05/24/2026, 05:44 PM

QUICK RANGE Last 1 hour

system.cpu.utilization

1 series



[a] avg 0.1659-0.3396 (65/66 pts)

Graph lines (OpenTelemetry)

a system.cpu.utilization where [Data point] state is not idle x AND [Resource] service.name is recommendation x + x + last value x

sum by [Data point] cpu x +

then avg by everything +

+ then

metric name where + rate . 5m

Query no grouping + Add

Formula e.g. a + b Add



checkmk



Search



Monitor



Customize



Setup



Changes



Help



User



Sidebar

Customize / Custom graphs - Design graph 'custom_graph_1'

POC

Concept

START

05/24/2026, 04:44 PM



END

05/24/2026, 05:44 PM



QUICK RANGE

Last 1 hour



system.cpu.utilization

2 series ⓘ



[a] service.name=load-generator 0.179-0.3365 (65/66 pts)
[a] service.name=recommendation 0.1659-0.3396 (65/66 pts)

▼ Graph lines (OpenTelemetry)

a system.cpu.utilization where [Data point] state is not idle × +
sum by [Data point] cpu × [Resource] service.name × +
then avg by [Resource] service.name × +
+ then

last value ×

Query

metric name where +

rate · 5m

no grouping × +

Add

Formula

e.g. a + b

Add

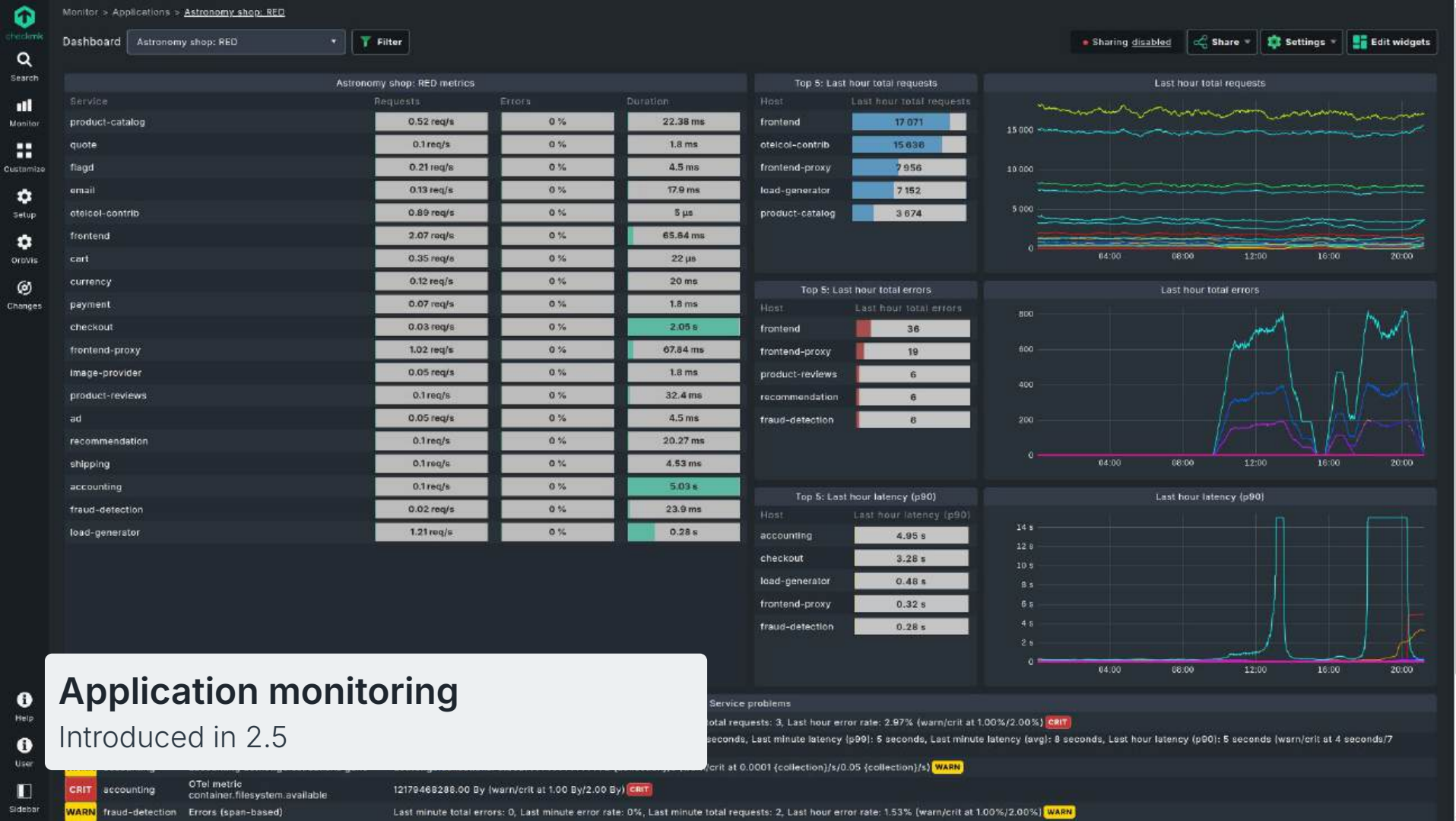
DEV </> Dev Tools Results SQL Connection Settings

From graph to alert

Demo



Link to video: [here!](#)



Service group RED

Commands Services Export Display Help

54 rows

play, accounting

State	Service	Icons	Summary	Age	Checked	Perf-O-Meter
OK	Errors (span-based)	☰ 🚩	Last 5 minutes total errors: 0, Last 5 minutes error rate: 0%, Last 5 minutes total requests: 34	18 h	18.6 s	0 %
WARN	Latency (span-based)	☰ 🚩	Last 5 minutes latency (p90): 4896.89 ms, Last 5 minutes latency (p95): 4914.68 ms, Last 5 minutes latency (p99): 4931.17 ms, Last 5 minutes latency (avg): 7134.21 ms, Last hour latency (p90): 4928.81 ms (warn/crit at 4000.00 ms/7000.00 ms) WARN	28 h	18.6 s	4.9 s
OK	Requests (span-based)	☰ 🚩	Last 5 minutes total requests: 34, Last 5 minutes request rate: 0.11 req/s	28 h	18.6 s	0.11 req/s

play, ad

State	Service	Icons	Summary	Age	Checked	Perf-O-Meter
OK	Errors (RPC)	☰ 🚩	Last 5 minutes total errors: 0, Last 5 minutes error rate: 0%, Last 5 minutes total requests: 12	2026-04-20 15:26:35	10.6 s	0 %
OK	Latency (RPC)	☰ 🚩	Last 5 minutes latency (p90): 4.91 ms, Last 5 minutes latency (p95): 7.00 ms, Last 5 minutes latency (p99): 9.40 ms, Last 5 minutes latency (avg): 1.88 ms	2026-04-20 15:30:19	10.6 s	4.91 ms
OK	Requests (RPC)	☰ 🚩	Last 5 minutes total requests: 12, Last 5 minutes request rate: 0.04 req/s	2026-04-01 19:01:09	10.6 s	0.04 req/s

play, cart

State	Service	Icons	Summary	Age	Checked	Perf-O-Meter
OK	Errors (HTTP)	☰ 🚩	Last 5 minutes total errors: 0, Last 5 minutes error rate: 0%, Last 5 minutes total requests: 99	28 h	58.6 s	0 %
OK	Latency (HTTP)	☰ 🚩	Last 5 minutes latency (p90): 0.01 ms, Last 5 minutes latency (p95): 0.02 ms, Last 5 minutes latency (p99): 0.05 ms, Last 5 minutes latency (avg): 0.00 ms	28 h	58.6 s	13 µs
			Last 5 minutes request rate: 0.33 req/s	28 h	58.6 s	0.33 req/s

Auto-generated RED metrics

Introduced in 2.5

Edit connection: otl

Connection Display Help

Connection properties

Connector type OpenTelemetry data - Metric backend

Sync interval (required)

0 Days 0 Hours 1 Minutes 0 Seconds

Metric backend filter criteria

Attribute filters

Resource attributes

Attribute key Attribute value

Scope attributes

Attribute key Attribute value

Data point attributes

Attribute key Attribute value

Resource attribute for hostname lookup

service.name

Limited options to define hostname

OpenTelemetry hosts creation options (required)

Create hosts in

otl

Host attributes to set

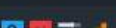
Monitoring agents: Checkmk agent / API int...

Configured API integrations, no Checkmk agent

Services of host checkout

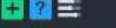
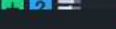
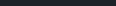
Actions Host Settings Display Help

Monitored services (3)

State	Service	Summary
 OK	Errors (RPC)	Last 5 minutes total errors: 0, Last 5 minutes error rate: 0%, Last 5 minutes total requests: 14
 CRIT	Latency (RPC)	Last 5 minutes latency (p90): 10000.00 ms, Last 5 minutes latency (p95): 10000.00 ms, Last 5 minutes latency (p99): 10000.00 ms, Last 5 minutes latency (avg): 29466.44 ms, Last hour latency (p90): 10000.00 ms (warn/crit at 4000.00 ms/7000.00 ms) CRIT
 OK	Requests (RPC)	Last 5 minutes total requests: 14, Last 5 minutes request rate: 0.05 req/s

Removed unneeded services

Disabled services (50)

State	Service	Summary
 OK	OTel metric container.cpu.time	Counter 'container_cpu_time__s__per_sec' has been initialized. Result available on second check execution.
 OK	OTel metric container.cpu.usage	0.00 {cpu}
 OK	OTel metric container.filesystem.available	8769773568.00 By
 OK	OTel metric container.filesystem.capacity	21395124224.00 By
 OK	OTel metric container.filesystem.usage	0.00 By
 OK	OTel metric container.memory.available	4612096.00 By
 OK	OTel metric container.memory.major_page_faults	190.00
 OK	OTel metric container.memory.page_faults	4508428.00
 OK	OTel metric container.memory.rss	14110720.00 By
 OK	OTel metric container.memory.usage	19918848.00 By
 OK	OTel metric container.memory.working_set	16359424.00 By
 OK	OTel metric container.memory.working_set	16359424.00 By



checkmk



Search



Monitor



Customize



Setup



Changes

Key
hints

Help



User



Sidebar

[Setup](#) > [Hosts](#) > [Dynamic host management](#) > Add connection

Add connection

Concept

Connection

Display

Help



✓ Save

↑ Dynamic host management

in order and the first matching rule determines how a host is created and which services are added to it.

Mapping rule 1

Rule template

Custom

Azure

AWS

Kubernetes

1

Select telemetry data for host creation

Filter incoming telemetry by attribute conditions.

Resource attributes

deployment.environment.name

Equals

production



Attribute key

Equals

Value

Scope attributes

Attribute key

Equals

Value

Data point attributes

Attribute key

Equals

Value

Filter flexibly

2

Name the hosts

Define the pattern used to generate the host name.



checkmk



Search



Monitor



Customize



Setup



Changes

Key
hints

Help



User



Sidebar

[Setup](#) > [Hosts](#) > [Dynamic host management](#) > Add connection

Concept

Add connection

Connection

Display

Help



✓ Save

↑ Dynamic host management

2

Name the hosts

Define the pattern used to generate the host name.

Host name template **(required)** ⓘ`$RESOURCE_ATTR.host.name$_$RESOURCE_ATTR.service.name$`Macros: `$RESOURCE_ATTR.key$` `$SCOPE_ATTR.key$` `$DATA_POINT_ATTR.key$`

Match to existing hosts / schemas

3

Select services to add to the hosts

Choose which services to create on each matched host.

☒ RED services ⓘ☐ Custom services ⓘ

Control created metrics

Filters ⓘ

Metric name

Exact

Regex

`jvm.memory.used`

Resource attributes

Attribute key

Equals

Value

Scope attributes

Attribute key

Equals

Value

Data points attributes



checkmk



Search



Monitor



Customize



Setup



Changes

Key
hints

Help



User



Sidebar

[Setup](#) > [Hosts](#) > [Dynamic host management](#) > Add connection

Add connection

Concept

Connection

Display

Help



✓ Save

↑ Dynamic host management

2 Name the hosts

Define the pattern used to generate the host name.

Host name template **(required)** ⓘ`$RESOURCE_ATTR.host.name$_$RESOURCE_ATTR.service.name$`Macros: `$RESOURCE_ATTR.key$` `$SCOPE_ATTR.key$` `$DATA_POINT_ATTR.key$`

3 Select services to add to the hosts

Choose which services to create on each matched host.

☒ RED services ⓘ☒ Custom services ⓘ

Filters ⓘ

Metric name

Exact

Regex

`system.cpu.utilization`

Only monitor metrics you really need

Resource attributes

Attribute key ▾

Equals ▾

Value

Scope attributes

Attribute key ▾

Equals ▾

Value

Data point attributes

Checkmk 3.0 will level up your monitoring



Ingest

Bring in any metric from any source seamlessly.



Visualize

Gain instant insights with powerful, custom visualization.



Monitor

Proactively track performance across your entire stack.

The Application Visibility Gap



Real-User Silence

Monitoring only works when users are active.



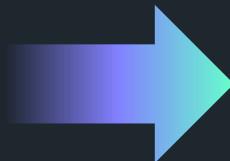
Regional Blindness

Localized network or ISP issues are invisible to server-side agents.



Third-Party Risk

External dependencies (CDNs, Auth providers) often escape internal traces.



From reactive
to proactive:

**Synthetic
Monitoring**

Checkmk Synthetic Monitoring



Checkmk 2.3.0 - 2.5.0
Test any application

Checkmk 3.0.0
**Provide a great
monitoring experience**

Synthetic monitoring

Demo



Link to video: [here!](#)

Applications

Data

Runtime

Middleware

O/S

Virtualization

Servers

Storage

Networking



Cloud & Container monitoring is foundational



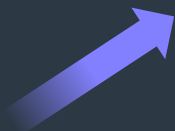
Cloud Monitoring

65%

Currently use

89%

Already / want to use



Container Monitoring

43%

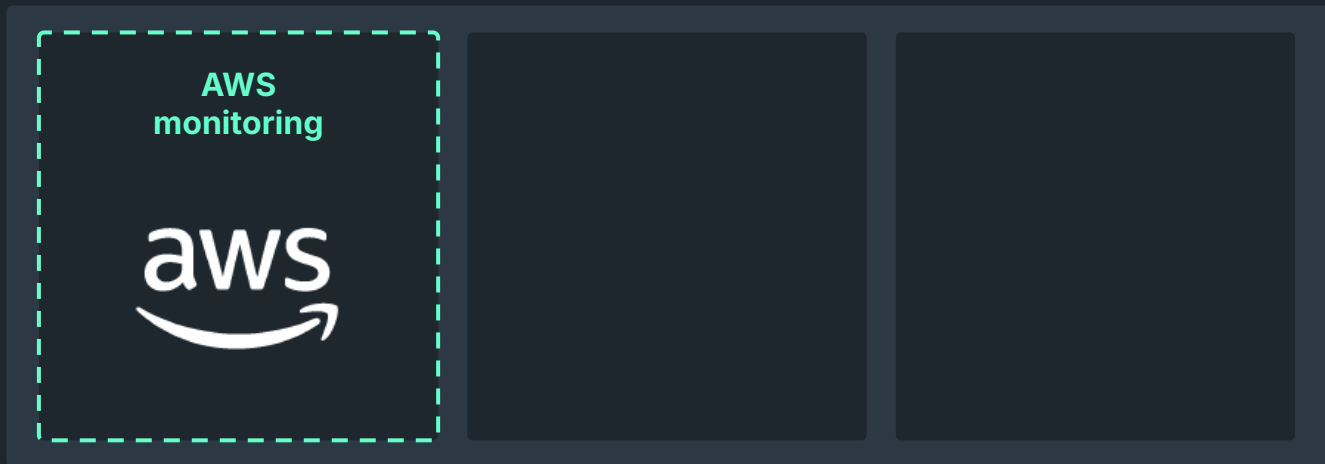
Currently use

86%

Already / want to use



Closing the visibility gap across entire hybrid IT



Checkmk already has broad AWS coverage



Monitoring for most relevant services is there

Compute & Containers

- EC2 (Elastic Compute Cloud)
- ECS (Elastic Container Service)
- Lambda

Storage

- S3 (Simple Storage Service)
- EBS (Elastic Block Store)
- Glacier

Database & Caching

- RDS (Relational DB Service)
- DynamoDB
- ElastiCache

Networking & Content

- ALB, NLB, ELB
- CloudFront
- Route 53

Management & Security

- CloudWatch
- WAFV2 (Firewall)
- SNS (Notification)
- AWS Health Status
- AWS Cost Explorer

So what?

Wow! – Experience for monitoring core AWS services

Our goals for Checkmk 3.0



Intuitive to navigate

Checkmk breaks down the complexity of cloud hierarchies:

- Revised host/services structure
- Easy-to-navigate dashboards



Driven by insights

Straight-forward identification and resolution with well-crafted:

- Service summaries
- Pre-built alerts



Well integrated

Smooth integration of monitoring sources:

- Checkmk Agent
- Cloud API

Closing the visibility gap across entire hybrid IT



Monitoring anything in the cloud

Demo

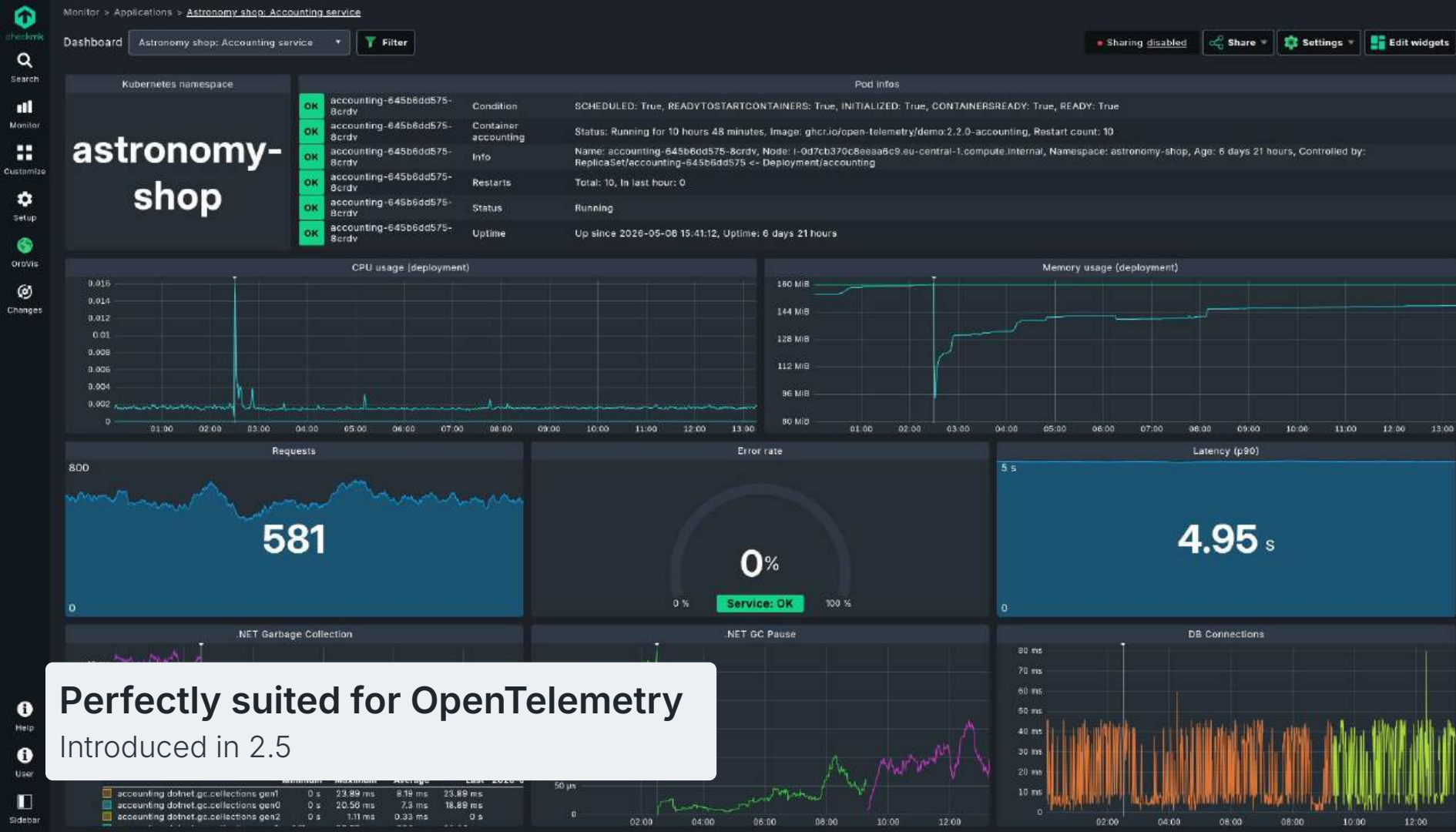


Link to video: [here!](#)

Closing the visibility gap across entire hybrid IT







**Requirements scaled
with adoption**

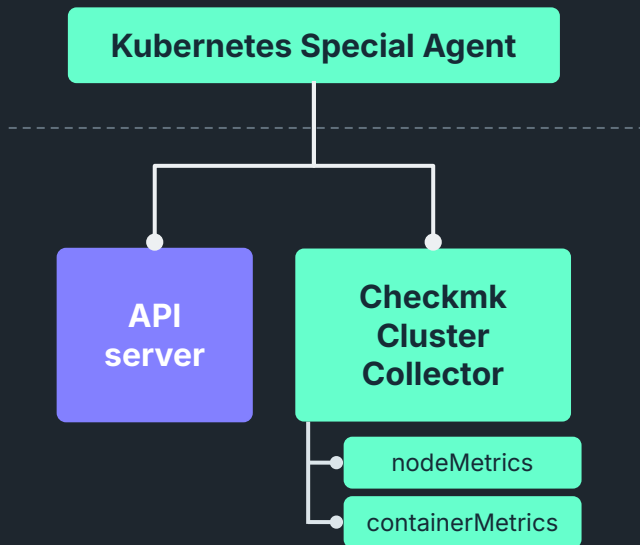
**Major Kubernetes
landscape changes**

At the heart sits a new architecture



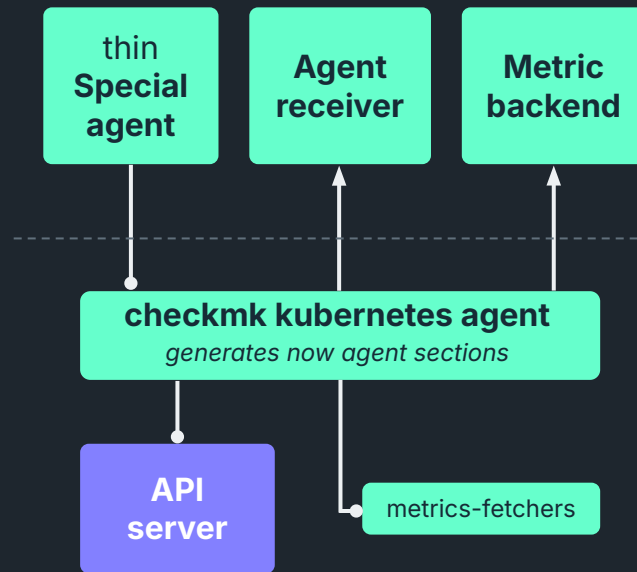
Checkmk 2.5 and before

Pull only



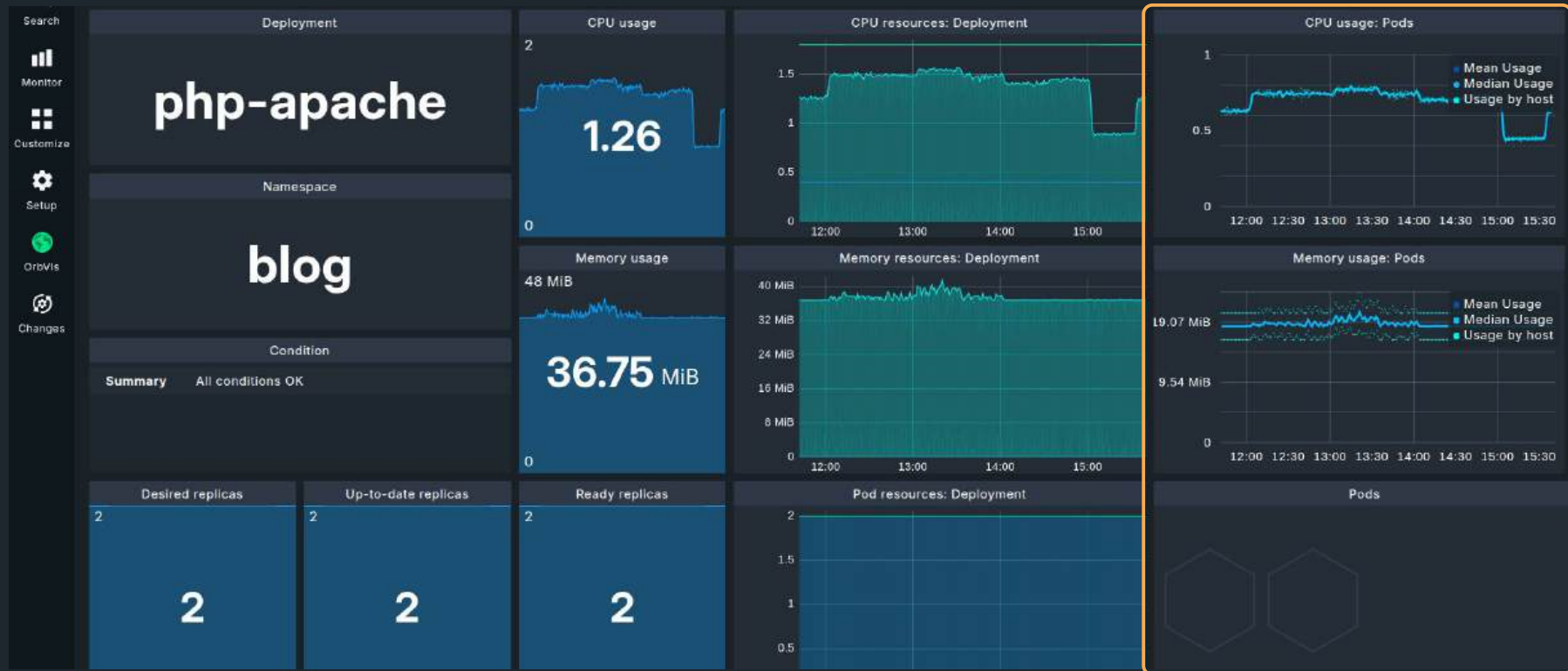
Checkmk 3.0

Pull and Push



Much higher performance and scalability

Container/pods move to metric backend for graphing & analytics



And much more will come in 3.0



Linux Agent

Unifying controller and updater

Default: One-directory deployment



Enterprise Identity Mgmt

SAML on distributed sites

User identity unification across connectors



Oracle Monitoring

Extended multi-tenant DB support on new plug-in architecture



Keeping up with vendors...

Veeam via REST API

Nutanix on v4 API

Applications

Data

Runtime

Middleware

O/S

Virtualization

Servers

Storage

Networking



*Observability
for your entire
hybrid stack*

**Reimagining
analytics,
visualization
& UX**

**Advancing
full-stack
observability**

**Embedding and
enabling AI**

Beyond 3.0

Embedding AI

Enabling AI

Embedding AI for faster troubleshooting

Our vision

Embedding AI



Find root causes



Predict what breaks next



Correlate alerts



Draft reports & reviews



What needs my attention right now?



RECOMMENDATIONS



Summarise all open issues and group them by likely root cause



What will break next if nothing changes?



Are today's alerts correlated, or separate incidents?



Which problems are recurring patterns vs one-offs this week?



Enabling AI

MCP server

REST API vs. MCP Server



REST API

Offers operations on objects

MCP Server

Offers higher level tools

Tailored and composable access

"Why is payment-api critical right now?"

REST API

- GET /objects/host/payment-api
- GET /.../service/.../all?host_name=...
- Each service: GET /objects/service/payment-api/...
- GET /.../comment/.../all?host_name=...
- GET /.../downtime/.../all?host_name=...
- GET /.../acknowledge/...
- History → needs Livestatus

MCP Server

```
diagnose_host(name="payment-api") →  
{  
    state,  
    failing_services: plugin output +  
    state changes,  
    active_downtimes,  
    unhandled_acks,  
    recent_flaps,  
    parents_state  
}
```

MCP? That's nothing new!



  jlk / checkmk-llm-server

[Code](#) [Issues](#) [Pull requests](#) [Agents](#) [Actions](#) [Security and quality](#) [Insights](#)

 **checkmk-llm-server** Public Watch 0

main 2 Branches 0 Tags + Code

 **jlk** and **claude** fix: resolve state filtering bug preventing service filtering ... 3e0989c · 9 months ago 118 Commits

 .claude/agents	Phase 1-3 Complete: Rename checkmk_agent to che...	9 months ago
 .kilocode/rules/memory-bank	Phase 1-3 Complete: Rename checkmk_agent to che...	9 months ago
 .kiro	Phase 1-3 Complete: Rename checkmk_agent to che...	9 months ago

MCP? That's nothing new!



The image shows two overlapping GitHub repository pages. The background page is for `jlk / checkmk-llm-server`, and the foreground page is for `chexma / vibeMK`. The foreground page shows the repository's main branch, a search bar, and a list of recent commits.

Repository: `vibeMK` (Public)

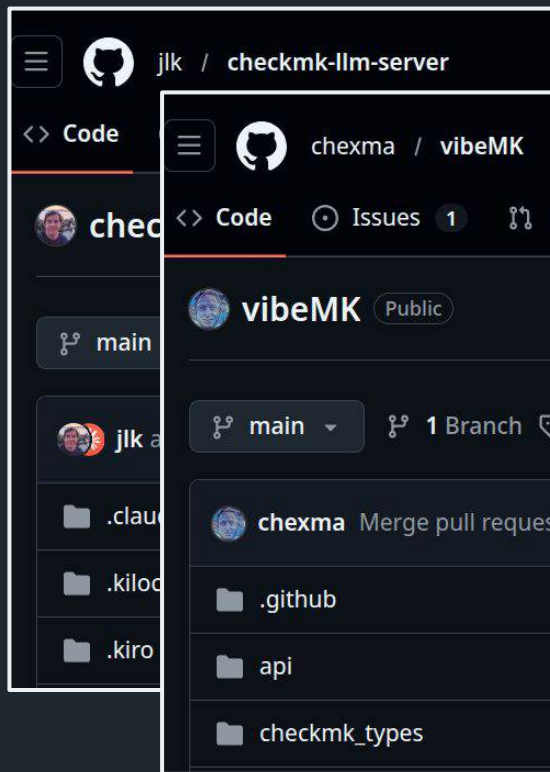
Navigation: Code, Issues (1), Pull requests, Agents, Actions, Projects, Security and quality, Insights

Branches and Tags: main (1 Branch), 3 Tags

Commits:

Commit	Message	Time
<code>8c7ef9f</code>	Merge pull request #1 from martinhv/main	9 months ago
	Fix GitHub CI workflow import errors	9 months ago
	Add gitignores	9 months ago
	Increment version to v0.3.9	9 months ago

MCP? That's nothing new!



Pardinus AI Suite > [Root Cause Analysis](#)

Root Cause Analysis

Display Help

Pardinus RCA

Fast shell loaded. Alert queue loads asynchronously from a bounded Livestatus candidate window of 100. Page size: 25.

Live alert queue

Agent routing:

Host	Service	State	Limit	
host regex...	service regex...	All problem states	Top 25	<button>Apply</button>

All problems Needs RCA RCA available Proactive covered

Visible queue is capped at 25; Pardinus only checks RCA history/proactive coverage for these visible rows. Candidate window: 100.

STATE	OBJECT	PLUGIN OUTPUT	RCA
CRITICAL	localhost / Filesystem /usr/lib/wsl/drivers	Used: 42.46% - 395 GiB of 931 GiB (warn/crit at 1.00%/2.00% used)(!!), trend per 1 day 0 hours: +5.97 GiB, trend per 1 day 0 hours: +0.64%, Time left until disk full: 89 days 15 hours	<button>Run RCA</button>
CRITICAL	localhost / Number of threads	460 (warn/crit at 1/2)(!!), Usage: 0.37%	<button>Run RCA</button>
CRITICAL	localhost / NTP Time	Offset: 1090.6070 ms (warn/crit at 200.0000 ms/500.0000 ms)(!!), Stratum: 3, Time since last sync: 11 minutes 7 seconds	<button>Run RCA</button>

3rd-party MCP servers are stuck on the outside

Can only reach through public APIs



**Re-implement
logic**

**Fragile
workarounds**

**Security
bolted on**

Token burn

Foundation for all AI integrations



Embedding AI: Native

✦ What needs my attention right now? >

RECOMMENDATIONS

Summarise all open issues and group them by likely root cause >

What will break next if nothing changes? >

Are today's alerts correlated, or separate incidents? >

Which problems are recurring patterns vs one-offs this week? >

AI agent community ecosystem



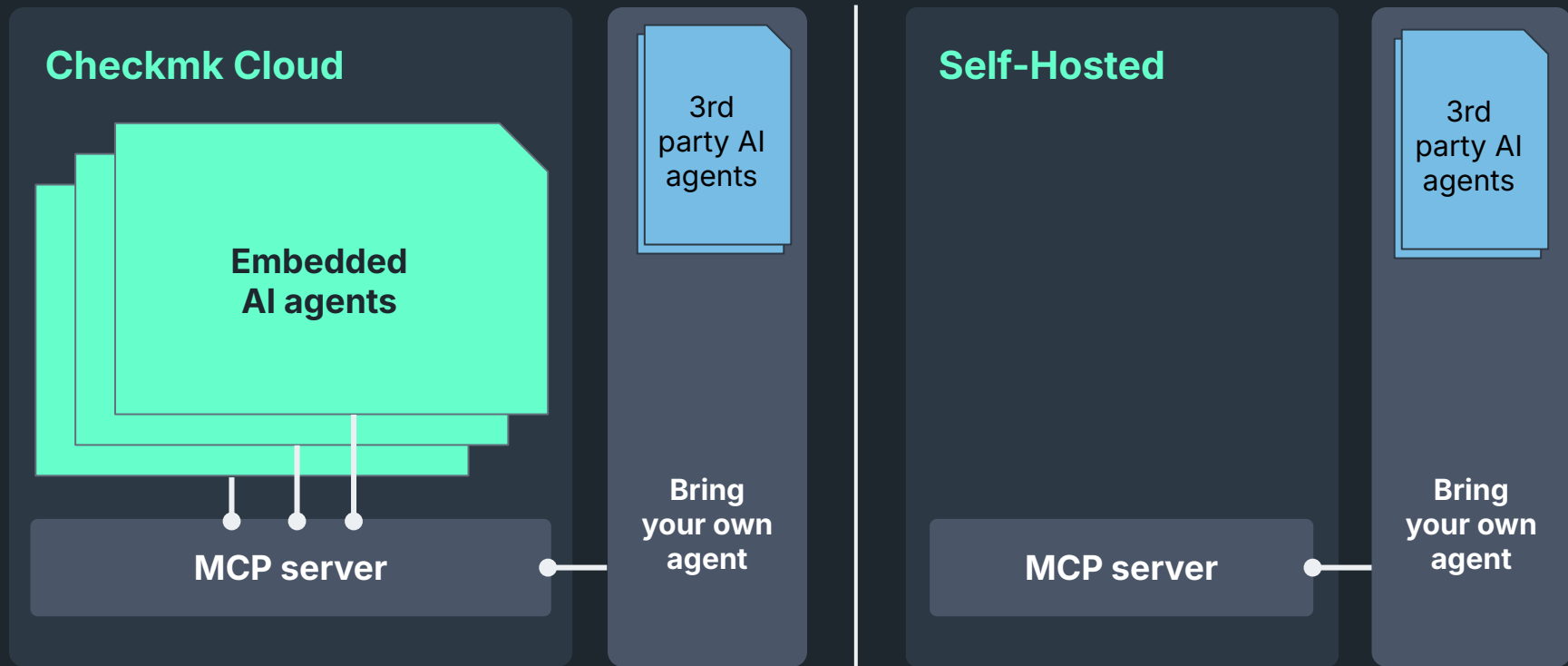
Enabling AI

MCP server

Our MCP runs on the inside



Flexible AI integration for Self-Hosted & SaaS





No hype.
AI that earns its place in production.



**Reimagining
analytics,
visualization
& UX**

**Advancing
full-stack
observability**

**Embedding
and enabling
AI**

Beyond 3.0

Checkmk

Unified IT Observability for the Hybrid World.

For Cloud. For On-Premises.



ITSM



AI Agents



Messaging



Automation

Integrate into workflows with API



Data Extraction



Network



Servers



OS



OTel/
Prometheus



Containers/
Virtualization

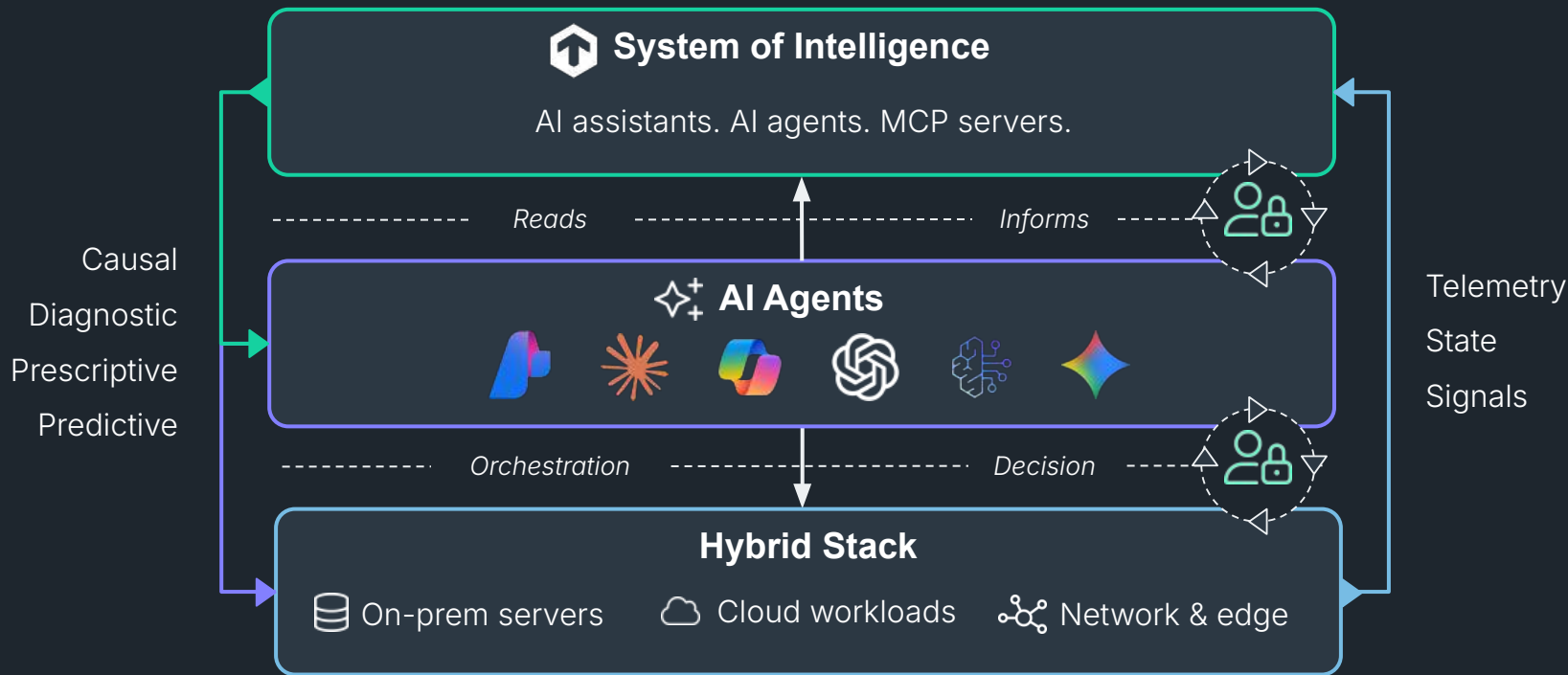


Databases

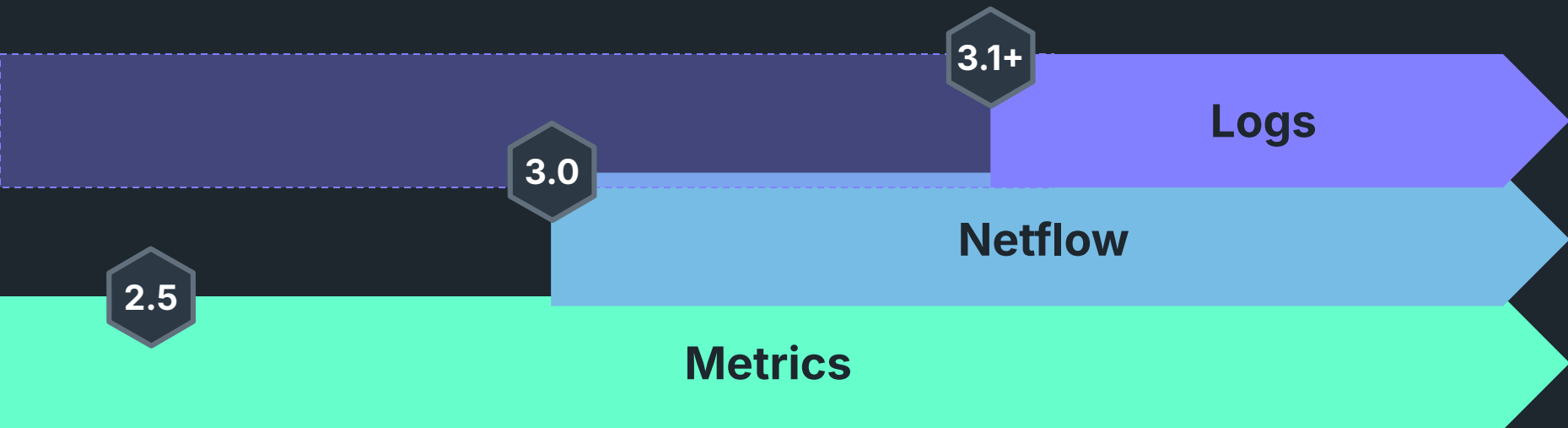


Applications

Checkmk as the system of intelligence for AI



Correlating signals for a complete view of your IT landscape





**Autonomous
Observability**



**Observability
for your entire
hybrid stack**

Checkmk #12

Conference