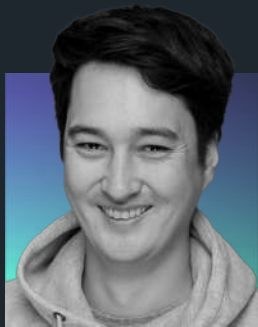


More on Infrastructure

Further Improvements in Checkmk 2.5



Martin Hirschvogel
Chief Product Officer
Checkmk



Full-stack observability

Infrastructure

Application

Synthetic



Best in class user experience



Faster troubleshooting with embedded AI



Advanced data analytics & visualization



A faster, more scalable platform

Full-stack observability

Infrastructure

Application

Synthetic



Best in class user experience



Faster troubleshooting with embedded AI



Advanced data analytics & visualization



A faster, more scalable platform



Monitoring integrations

New integrations.



Strategic & support-driven



From ideas portal



Financed by customer



Financed by customer



**Extended /
Modernized**

Monitoring integrations

Many improvements for core monitoring incoming




CISCO
Meraki
*and more
network news*

`check_http`
`check_cert`

ORACLE



Agent



net>scaler™











Raritan®
A brand of Legrand



*and much
more ...*

Native Windows time sync monitoring



| | | | | |
|----|---|---|---|-------------|
| OK | Windows time service |     | Offset: -37 microseconds, Last successful sync: 14 minutes 25 seconds ago, Source: time.windows.com, Stratum: 4 | -37 μ s |
| OK | Windows time service peer time.windows.com,0x8 |   | Last successful sync time: 31.05.2026 21:40:37, Stratum: 3, Next poll in: 2 minutes 24 seconds | |
| OK | Windows time service peers |   | Found 1 peer, Failed: 0 | |

Sensible, tunable defaults. For both time service and peers.

 Time offset

 Last-sync outcome

 Stratum

 Max age since last successful sync

From noise to signal: Windows event log



▼ **Fine-tune Windows event log monitoring**

Configuration of individual event logs

Add tuning configuration

✖ Filtering by event ID

Event log: Security Include only messages with IDs: Do not exclude messages

- 1102
- 4625
- 4720-4740
- 4672

Add event ID or event ID range

Event log: System Include all messages Exclude messages with IDs:

- 1014
- 10016
- 7036

Add event ID or event ID range

🎯 Event ID:

- 🏠 Fine-grained control
- 🏠 Flexible allowlisting and exclusion logic

From noise to signal: Windows event log filtering



Fine-tune Windows event log monitoring

Configuration of individual event logs

Add tuning configuration

Filtering by event ID

Filtering by event source

All event logs

Include all

Exclude messages from sources:

Microsoft-Windows-Security-SPP

Microsoft-Windows-Defrag

Microsoft-Windows-Search

Microsoft-Windows-Kernel-EventTracing

Add source

Add event source filter rule

Event ID

Source:

Drop chatty sources

From noise to signal: Windows event log filtering



Fine-tune Windows event log monitoring

Configuration of individual event logs


Add tuning configuration

- Filtering by event ID
- Filtering by event source
- Filtering by event user

 Event ID

 Source

 User:

 When you know what you are doing

From noise to signal: Windows event log filtering



Fine-tune Windows event log monitoring

Configuration of individual event logs

Add tuning configuration

- ✘ Filtering by event ID
- ✘ Filtering by event source
- Filtering by event user
- ✘ Filtering by message pattern

Event log: MyApplication Regular expression
.*(error|failed|fatal|timeout|exception|denied).*


Add message pattern filter rule

 Event ID

 Source

 User

 Pattern

 Catch app-specific errors

From noise to signal: Windows event log filtering



Fine-tune Windows event log monitoring

Configuration of individual event logs

Add tuning configuration

- Filtering by event ID
- Filtering by event source
- Filtering by event user
- Filtering by message pattern
- Specify mappings of remote IPs to cluster names

Name of the cluster (required)



Cluster node IPs (required)

Add cluster mapping

 Event ID

 Source

 User

 Pattern

Checkmk appliance cluster compatible

No log storm in case of a failover

MS SQL monitoring: Time to make the switch



Legacy VBS-based plug-in
Version 2.2 and older



Modern cross-platform plug-in
2.3 and the future

New plugin matured and with complete functionality

- NEW** SQL Server authentication over ODBC (no silent fallback)
- NEW** Clustered instances & Always On Availability Groups handled
- NEW** Trust Server Certificate support, secrets redacted from logs

Migrate now! Old VBS based is now deprecated and will be removed with 3.0.0

You can now also migrate all other VBS plug-ins



Safer & maintainable

**Same services
No reconfiguration**

mk_inventory: Windows HW/SW Inventory

citrix_licenses: Citrix license server usage

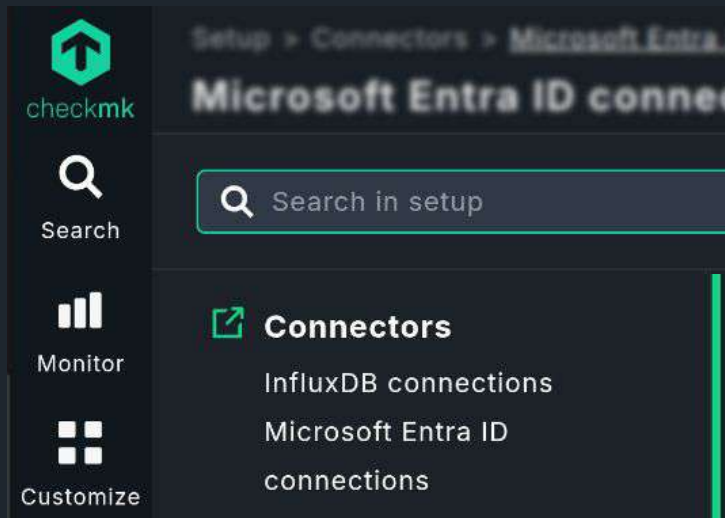
kaspersky_av_client: Kaspersky Anti-Virus status

mk_mysql: MySQL running on windows

rds_licenses: Remote Desktop Services licensing

windows_multipath: Windows MPIO multipath I/O

windows_updates: Windows Updates status

A screenshot of the Checkmk Setup web interface. The left sidebar contains navigation icons for 'checkmk', 'Search', 'Monitor', and 'Customize'. The main content area shows a breadcrumb trail 'Setup > Connectors > Microsoft Entra...' and a search bar with the text 'Search in setup'. Below the search bar, the 'Connectors' section is expanded, showing 'InfluxDB connections' and 'Microsoft Entra ID connections'.

Setup > Connectors > Microsoft Entra...

Microsoft Entra ID connections

Search in setup

Connectors

- InfluxDB connections
- Microsoft Entra ID connections

Setup > Connectors > Microsoft Entra

Setup > Connectors > [Microsoft Entra ID connections](#) > [Add Microsoft](#)

Add Microsoft Entra ID connection

Display Help

Microsoft Entra ID connections

- Open or register Microsoft Azure Entra ID app
- Copy app IDs

Navigate to the app overview (Essentials). Copy the Application (client) ID (tenant) ID into the fields below.

IDs

Authority

Directory (Tenant) ID

Application (Client) ID

Next step Previous step
- Add redirect URI
- Add app permissions

MS Exchange Online mail monitoring: 'Future-proof'



Setup > Connectors > Microsoft Entra ID connections > Add Microsoft

Add Microsoft Entra ID connection

Display Help

Microsoft Entra ID connections

- Open or register Microsoft Azure Entra ID app
- Copy app IDs**
Navigate to the app overview (Essentials). Copy the Application (client) ID into the fields below.
IDs

Authority: Global

Directory (Tenant) ID (required)

Application (Client) ID (required)

Next step Previous step

- Add redirect URI

Setup > Services > HTTP, TCP, email, ... > Check IMAP/EWS/GraphApi Mailboxes

Add rule: Check IMAP/EWS/GraphApi Mailboxes

Rule Related Display Help

Service name (required)

Mailboxes

Mail receiving

Microsoft Exchange Online

Microsoft Graph API endpoint (required)

graph.microsoft.com

Microsoft Entra ID connection

No options available (required)

Create

- Connect timeout
- Message age of oldest messages
- Message age of newest messages
- Message count

After 24 hours of inactivity: Token is invalidated by MS. Re-authenticate via the UI...

Cisco Meraki monitoring: designed by an expert

Cisco Meraki special agent

This is an enhanced version of the build In Cisco Meraki special agent.

This plugin has become part of Checkmk 2.5.0 see Werk #19547

- ▶ Cisco Meraki special agent
- ▶ Appliance Utilization
- ▶ Appliance Uplinks
- ▶ Appliance VPNs
- ▶ Device Info
- ▶ Device Status
- ▶ Device Uplinks
- ▶ Licenses Overview
- ▶ Networks
- ▶ Organisation API
- ▶ Switch Port Status
- ▶ Wireless Devices Status
- ▶ Wirelss Ethernet Status
- ▶ Sensor Readings

Project information

Discontinued, this plugin has become part of Checkmk 2.5.0 see Werk #19547

Network Visu...

CMK version 2.2 CMK version 2.3
CMK version 2.4
discontinued part of CMK now

179 Commits

3 Branches

0 Tags

README

GNU General Public License v2.0 or later

CHANGELOG

CONTRIBUTING

Created on

November 06, 2023

Cisco Meraki monitoring: designed by an expert

Cisco Meraki special agent

Project information

Discontinued, this plugin has become

This is an enhanced

Topology for Lldp

This plugin has

► Cisco Meraki spec

► Appliance Utilizati

► Appliance Uplinks

► Appliance VPNs

► Device Info

► Device Status

► Device Uplinks

► Licenses Overview

► Networks

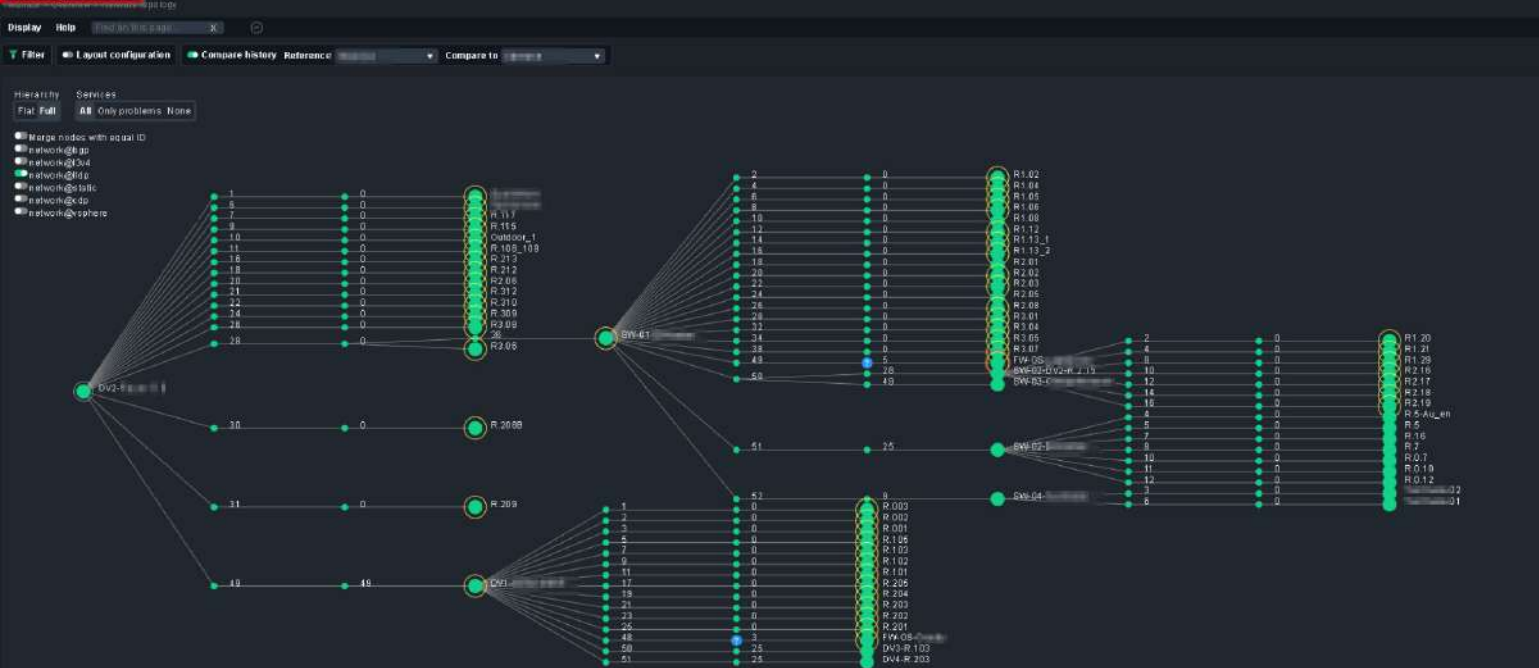
► Organisation API

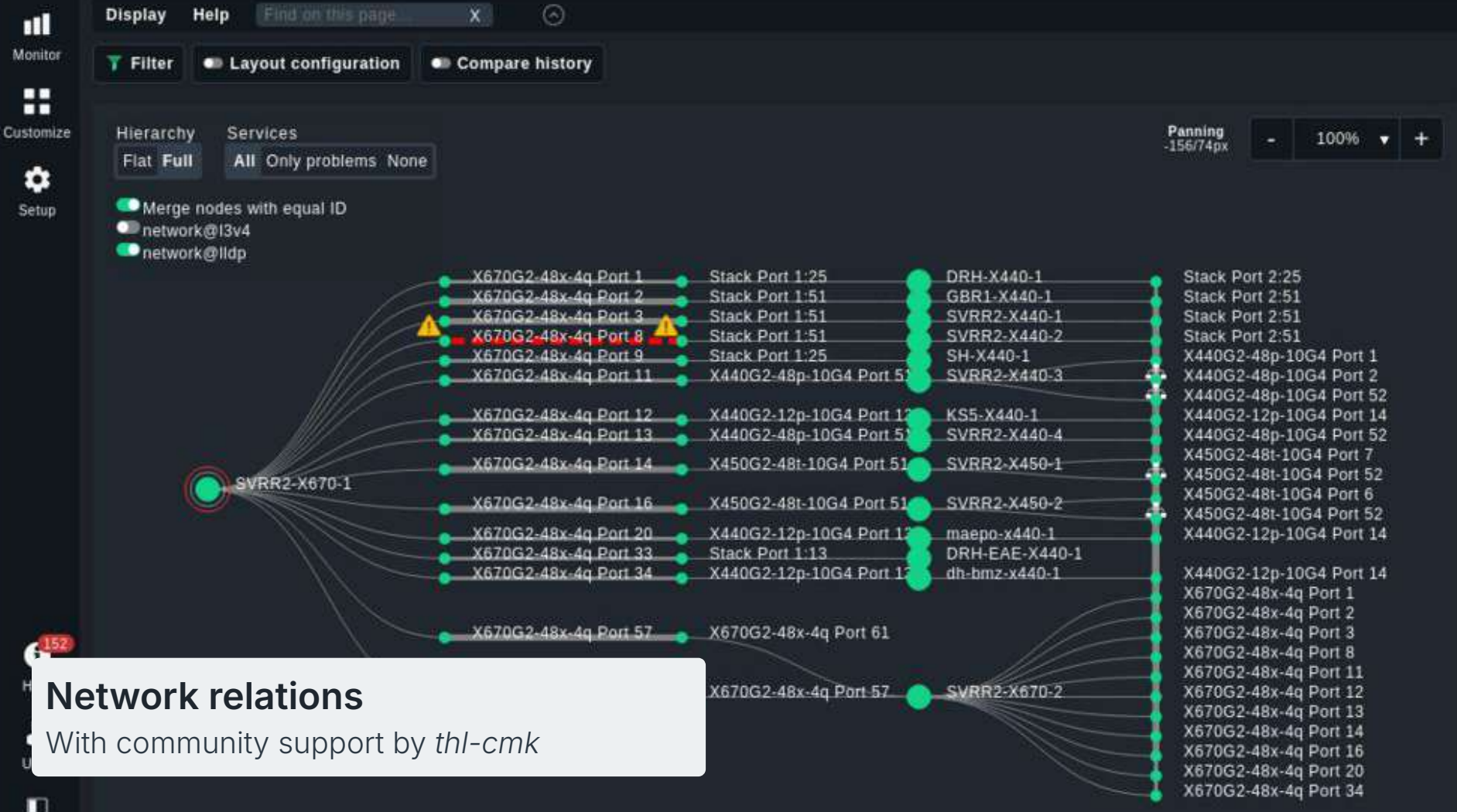
► Switch Port Status

► Wireless Devices

► Wirelss Ethernet S

► Sensor Readings





Network relations

With community support by *thl-cmk*



You are only one MKP away from this now

Topology inventory data now built-in

- Layer 2: CDP + LLDP
- Layer 3: SNMP, Windows, & Linux IP
- Interface names

NVDCT by thl-cmk

Network Visualization Data Creation Tool

The only missing piece to complete your network topology visualization.

NEW

GUI setup with active check support

OK

NVDCT



Time taken: 11 milliseconds, Last run
at: 2026-06-01 10:24:49, Objects: 12,
Connections: 11, Layer(s): LLDP

2026-05-22 14:23:13

24.5 s

11.2243 ms

Modernization allows continuous enhancements



2.3.0: Revolution

- **MS SQL**

- **HTTP monitoring v2**

- **Certificate monitoring**

2.4.0 - 2.5.0: Evolution

- **MS SQL:** Handle more edge cases, better performance

- **HTTP/Cert:** Direct hosts, self-signed certificates, ip protocol, improved output


Continuous improvements to HTTP monitoring



OK

HTTPS
sough.life





URL to test:  , Version: HTTP/2.0, Status: 200 OK


29 m


47.6 s

0.11 s

✕ Search for strings 

Search for header 

Search in body 

✕ Service state for failing text search condition. 

CRIT ▾

✕ TLS version 

Negotiate ▾ Allow higher versions

✕ Enable compatibility mode 

✕ Proxy

Manual proxy configuration ▾

Scheme

HTTP ▾

Proxy server name or IP address (required)

Port

0

✕ Authentication for proxy required

Username (required)

Password



Refined certificate monitoring



OK

CERT
sough.life



Verification: OK, Subject CN: sough.life, Server
certificate validity: 79 day(s)

49.6 s

49.6 s

79 d

✕ Connection type i

TLS/SSL ▲

TLS/SSL

SMTP STARTTLS

Postgres STARTTLS

IMAP STARTTLS

LDAP STARTTLS

✕ Proxy

Manual proxy configuration ▼

Scheme

HTTP ▼

Proxy server name or IP address (required)

Port

0

✕ Authentication for proxy required

Username (required)

Password

Modernization allows continuous enhancements



2.3.0: Revolution

2.4.0 - 2.5.0: Evolution

3.0.0

■ MS SQL

■ MS SQL: More edge cases,
better performance

■ HTTP monitoring v2

■ HTTP/Cert: Direct hosts,
self-signed certificates, ip
protocol, improved output

■ Certificate monitoring

■ **Oracle database monitoring:**
Foundation

Oracle: Experimental



- Supported architectures:
 - x86_64: Linux, Windows, Solaris
 - ppc64: AIX
- System or manually installed client; sqlplus as fallback
- Plug-in as a called executable to provide sync and async sections.
- Scalable custom SQLs also for PDBs



The screenshot shows a configuration window for the Oracle Database. At the top, there is a dropdown menu labeled "Deploy Oracle plug-in". Below it, the "Database Instances" section is visible, containing a table with one instance named "MYSID". The table has columns for "SID" and "Oracle type of authentication". Below the table is a button labeled "Add new database instance". The "Oracle Database default configuration" section is also visible, showing the "Oracle type of authentication" dropdown set to "User & Password". Below this, there are fields for "Username (required)" with the value "myusername" and "Password" with a masked value ".....". There is also a "Role" dropdown and a "Connection options" section at the bottom.

Agent controller now also runs on ARM



561

votes

ARM support for agent controller

Checkmk agent controller should run on platforms like Raspberry and similar out-of-the-box

Suggested by: **Edgar** (04 May, '22) • Upvoted: 19 Mar • [Comments: 8](#)

Released

#Agents

#Version 2.5

Agent controller now also runs on ARM



561
votes

ARM support for agent controller



Search



Monitor



Customize



Setup



Changes

Setup > Agents > [Windows, Linux, Solaris, AIX](#) > [Agent rules](#) > [Customize agent package \(Linux\)](#) > [Add rule: Customize agent package \(Linux\)](#)

Add rule: Customize agent package (Linux)

Rule Related Display Help

> Rule properties

Value

Installation directories

Directory for Checkmk agent

Directory for storage of temporary data (set TMPDIR environment variable)

Customize user

Architecture of the systems where the agent will be deployed

x86 64-bit only ▲

x86 64-bit only

ARM 64-bit only

x86 64-bit or ARM 64-bit

> Conditions

Better agent updater integration

- ◆ **New synchronous plug-in** for Check_MK Agent service (not using cached info)
- ◆ Updater runs under **agent controller user**

```
cmk-agent-ctl register --automatic-updates -s<server> -i <site> -H <hostname> -U <user>
```

Unified registration

- ◆ Agent controller can also register agent updater
- ◆ Agent registration role can also register agent updates

Migrate at your own pace

Existing automated workflows continue to work

A hexagonal graphic with a vertical gradient from light blue at the top to dark blue at the bottom.

New

A rounded rectangular graphic with a horizontal gradient from light blue on the left to dark blue on the right.

**Extended /
Modernized**

Monitoring integrations

Checkmk #12

Conference