Integrating a notification channel in Checkmk

May 21, 2025 - Live from Paulaner am Nockherberg, Munich

Ronald (Ron) Czachara
Business Development
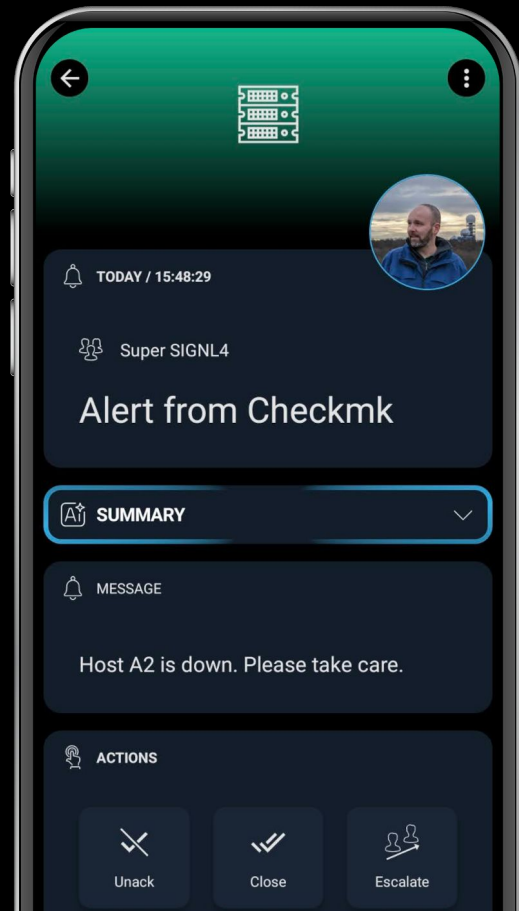Derdack / SIGNL4

About Me and SIGNL4

Ronald (Ron) Czachara
- Co-founder Derdack / SIGNL4
- Business Development, GTM

SIGNL4
- Mobile alerting and anywhere incident management
- Integration with Checkmk

TODAY / 15:48:29

Super SIGNL4

Alert from Checkmk

SUMMARY

MESSAGE

Host A2 is down. Please take care.

ACTIONS

Unack   Close   Escalate

Why another notifications channel?

- When SMS and email are not enough ⇨ Multiple channels, escalation, on-call planning, mobile app, status updates

- Ticketing, no-code, enrichment, reporting, AI

- Inspirations for own ideas

  ⇨ Create your own Extension package
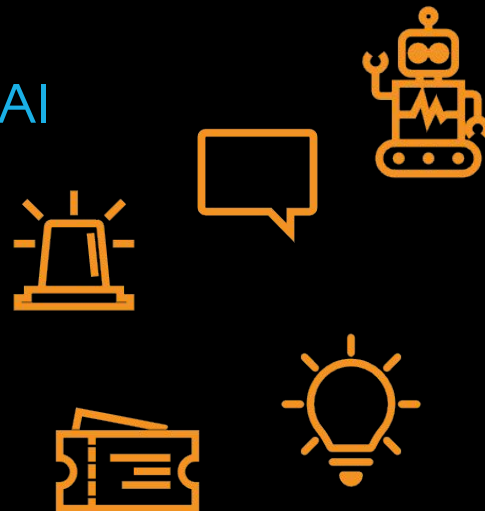
Browse through the packages

Sort by: Date   Rating   **Views**   Downloads

SSL-Certificates
by Robert Sander <r.sander@heinlein-support.de>
Agent Plugin to check SSL certificates in sp
ata in agent data section Is now able to ign
📅 2 Jan 2019   👁 48971   ⬇ 19626   ⭐ 5.0

Microsoft Teams Notification Plug
by ricardoftribeiro
Sends notifications to a MS Teams Channel
and select (•••) More Options from the top
📅 12 Apr 2021   👁 40327   ⬇ 7968   ⭐ 4.7

Robotmk v1 | Robot Framework E
by simonmeggle
Robotmk integrates Robot Framework resul
📅 1 Jul 2020   👁 37834   ⬇ 31277   ⭐ 5.0

Redfish Restful API Checks
by Andreas-Doehler
- 2.3.20 - fast alles nach 2.3 migriert - 2.3.2
24 - all migrated - only password cannot e
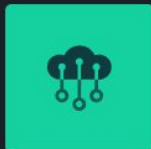📅 22 May 2023   👁 33517   ⬇ 12583   ⭐ 4.0

SIGNL4 - Critical Mobile Alerting
by SIGNL4 Team
When critical systems fail, incidents happen or urgent services need to be provided, SIGNL4 bridges the 'last mile' to your staff, engineers, IT
admins and workers 'in the field'. It adds real-time mobile alerting to your services, systems and processes in no time. SIGNL4 notifies thro...
📅 23 Jan 2020   👁 32328   ⬇ 12099   ⭐ 5.0

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checkmk Exchange

Browse   Upload package   How to contribute   🔍 Search...

SIGNL4 - Critical Mobile Alerting

Description   All versions   Reviews

👤 **Owner:** SIGNL4 Team

👁 **Views:** 48998

⬇ **Downloads:** 12125

🕐 **Updated on:** 31 Aug 2023

☰ **Number of versions:** 11

▢ **Source:** Website

Description

When critical systems fail, incidents happen or urgent services need to be provided, SIGNL4 bridges the 'l
ast mile' to your staff, engineers, IT admins and workers 'in the field'. It adds real-time mobile alerting to yo
ur services, systems and processes in no time. SIGNL4 notifies through persistent mobile push, text and v
oice calls with acknowledgement, tracking and escalation. Integrated duty and shift scheduling ensures th
e right people are alerted at the right time. SIGNL4 thus provides for an up to 10x faster and effective resp
onse to critical alerts, major incidents and urgent service requests.
Get the app at https://www.signl4.com.

Version 2.1.0   Latest version

⚠ Note: This version requires Checkmk version 2.0.0 or higher.

exchange.checkmk.com

Package SIGNL4

Package **Display** **Help** ⌃

✓ **Save**   ⬆ **Extension packages**

∨ Package properties

Package name (required) ························   SIGNL4

Package version (required) ·····················   2.2.0

Minimum required Checkmk version ········   2.0.0

Valid until Checkmk version ·················   No version limitation ▼

Title (required) ·······························   SIGNL4 - Critical Mobile Alerting

Author ····································   SIGNL4 Team

Homepage / Download - URL of this pack   https://github.com/signl4/signl4-integration-checkmk

Notification Package (MKP File)

- SIGNL4-2.1.0.mkp (zip)
  - info
  - info.json
  - notifications.tar
    - signl4 – Python logic, e.g. sending HTTP request
  - web.tar
    - plugins
      - wato
        - signl4.py – Config, e.g. API key

Config via YAML now

Checkmk #11
Conference

Create your own Extension Package (MKP)

- Command line: mkp

- GUI …
  /omd/sites/checkmk2/local/share/check_mk/notifications/conference_11
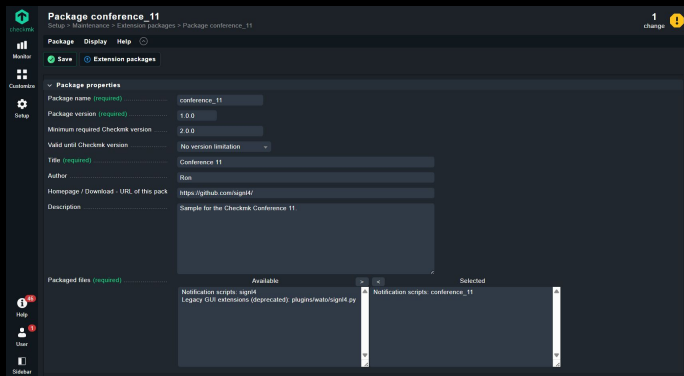
Create package

Package **Display** **Help** ⌃

✔ **Save** | ⏶ **Extension packages**

∨ **Package properties**

Package name (required) .... conference_11

Package version (required) 1.0.0

Minimum required Checkmk version 2.3.0

Valid until Checkmk version .... No version limitation ▾

Title (required) .... Conference 11

Author .... cmkadmin

Homepage / Download - URL of this pack https://github.com/signl4/

Description .... Test script for the Checkmk Conference 11.

Packaged files (required) ....

Available	>	<	Selected
Notification scripts: signl4			Notification scripts: conference_11
Legacy GUI extensions (deprecated): plugins/wato/signl4.py			

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ℹ **Help**

1

Python and Webhooks

- Messaging and alerting
- Close alerts
- Alert enrichment

```python
host_name = context['HOSTNAME']

message = {
    'message': 'Problem on ' +
host_name
}

resp = requests.post(api_url,
params=None, data=json.dumps(message))
```

chmod +x extension.py

Development and Debugging

- Documentation 👍
- Community
- Check out other packages (Hello world!)
- Test – GUI: Test notification
- Logs
- Request bin

DERDACK
SIGNL4

Checkmk
Conference #11

Notification configuration
Setup > Events > Notification configuration

Notification rules   **Display**   **Help**   [Find on this page ...] 🔍

➕ **Add rule**   🧪 **Test notifications**   **Show analysis**   **Show bulks**

Test notifications

Test notifications on	**Host** **Service**
Host (required)	Host-8 ✕ ▾
Simulate	Status change ▾
	From UP ▾ to DOWN ▾
Plug-in output	This is a notification test

☐ Send out HTML/ASCII email notification according to notification rules (uncheck to avoid spam)

› **Advanced condition simulation**

Test notifications   **Cancel**

Global notification rules

#	Actions	Type	Plug-in	Bulk	Description
0	🖊 📋 ↕ 🗑	✅	conference_11		Notify all contacts of a
1	🖊 📋 ↕ 🗑	✅	mail		Notify all contacts of a
2	🖊 📋 ↕ 🗑	✅	signl4		Notify all contacts of a

R
rons4
rczachara@de.derdack....

Search... /

Workspace

Projects

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Sources

Accounts

Data Stores

Event History

Settings

Resources > 9

Getting Started 2/4
Next: Connect an account

Free
Credits Used 3/100

> Active Resources
> Data Stores

Upgrade

← > Request Bin ✎

name slug: request-bin • last updated: 3 months ago • created: 4 years ago

EVENTS LOGS CONFIGURATION

2 over last 24 hours

Today

10:31 PM POST /
10:30 PM POST /

Jan 14, 2025

1:26 PM POST /TicketUpdate
1:26 PM POST /TicketUpdate
1:26 PM POST /TicketUpdate
11:42 AM POST /UserCheck
11:37 AM POST /UserCheck
11:19 AM POST /UserCheck
11:17 AM POST /UserCheck
11:12 AM POST /UserCheck
11:07 AM POST /UserCheck
11:01 AM POST /UserCheck
10:50 AM POST /UserCheck

DELETE ALL EVENTS

EVENT   2025-04-04T22:

Raw {} Pretty ⅀ Structured

▸ body {1}
▾ bodyRaw
      {
         "message": "Hello to Munich."
      }
   client_ip: 84.173.5.220
▸ headers {5}
   method: POST
   path: /
▸ query {0} Copy Path • Copy Value
▸ url https://b58aee12b873eae71b5db8b4fdc77d78.m.pipedream.net/

INTEGRATIONS

Workflows

CREATE WORKFLOW   View Tutorial (1 minute)

Two-Way Status Updates

Comments of host Host-8

Monitor > Overview > All hosts > Host-8 > Services of host > Comments of host Host-8

Commands   **Host**   **Export**   **Display**   **Help**   ⌃

🔨 **Delete comments**   ▼ **Filter**   ◯ **Show checkboxes**   ⊕ **Services of host**

Author	Comment text
cmkadmin	Acknowledged by SIGNL4 user: Ron
cmkadmin	Ron: I will take care.

API for Status Updates

```
# Checkmk: Acknowledge and annotate host
POST
http://192.168.2.99/checkmk/check_mk/api/1.0/domain-types/acknowledge/collecti
ons/host
Content-Type: application/json
Accept: application/json
Authorization: Bearer cmkadmin *****

{
  "acknowledge_type": "host",
  "sticky": false,
  "persistent": false,
  "notify": false,
  "comment": "I will take care.",
  "host_name": "Host-8"
}
```

VS Code
Postman
curlbuilder.com

DERDACK
S I G N L 4

Checkmk #11
Conference

Summary / Checklist

- Need more than email or SMS?
- Checkmk Exchange?

⇨

- Build your own Extension package (MKP)
- Use the API for status updates

Checkmk #11
Conference

Questions? Comments?

LinkedIn: Ronald Czachara