

Checkmk
Conference #10



You will love

Checkmk notifications in 2.4



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Checkmk GmbH

The Checkmk notification system is powerful ...



checkmk Edit notification rule 1
Setup > Events > Notification configuration > Edit notification rule 1

Notification rule Display Help

> Rule properties

Notification method

Notification Method HTML Email

Create notification with the following parameters

- From
- Reply to
- Subject for host notifications
- Subject for service notifications
- Display additional information
- Add HTML section above table (e.g. title, description)
- URL prefix for links to Checkmk
- Display graphs among each other
- Graphs per notification (default: 5)
- Bulk notifications with graphs (default: 5)
- Notification sort order for bulk notifications
- Send separate notifications to every recipient
- Enable synchronous delivery via SMTP

Notification Bulking

> Contact selection

All contacts of the notified object * Notify all contacts of the notified host or service.

All users Notify all users

All users with an email address Notify all users that have configured an email address:

The following users

Members of contact groups

Explicit email addresses

checkmk Edit notification rule 1
Setup > Events > Notification configuration > Edit notification rule 1

Notification rule Display Help

> Conditions

Match sites Available > Selected
beta - atlanta | stable - munich

Match folder Piggyback

Match host tags

Match host labels

Match host groups

Match hosts *.check (Select host)

Exclude hosts

Match service labels

Match service groups

Exclude service groups

Match service groups (regex)

Exclude service groups (regex)

Match services

Exclude services

Match check types

Match check plug-in output

Match contacts

Match contact groups

Match service level from: 20 - Gold to: 30 - Platinum

... gives you all the tools you need ...



Setup

Notifications

Contact groups

Time periods

Host monitoring rules

Assignment of hosts to contact groups

Delay host notifications

Enable/disable notifications for hosts

Notification period for hosts

Periodic notifications during host problems

Notified events for hosts

Service level of hosts

Service monitoring rules

Assignment of services to contact groups

Delay service notifications

Enable/disable notifications for services

Notification period for services

Periodic notifications during service problems

Notified events for services

Service level of services

Maximum number of check attempts for service

Parameters for Slack, ServiceNow, Opsgenie, ...

Other services

Check notification number per contact

Global settings

Really a lot of options...

... but is hard to use



How to Setup Notification Escalation?

■ General checkmk-v2-1, notifications



switch609

5h

Hello

I was wondering if it was possible to setup Notification Escalation.


Let say email gets sent out level 1 support if the issue is not acknowledge after 1 hour it then gets escalated to level 2 support team so on so forth.

▼ Description


Hi Support,


it is possible disable fallback notification? We receive thousands of fallback emails every day for alerts that do not match the notification rules. We would like to avoid this unnecessary email load because it creates load problems for us. We only need to receive notifications that match the rules

Thanks and BR,



**Make configuring,
troubleshooting, and optimizing
of notifications easy**





Disclaimer: Early stage concepts

A new way to configure notifications

Add notification rule

Setup > Notifications > Add notification rule

Concept - Work in Progress

Notification rule Related Display Help

✖ Cancel

⬆ Notifications

1 Define host/service events

Define any host or service events you want to be notified about.

2 Specify host/service conditions

Specify conditions to determine which hosts and which services will be affected by this notification rule.

3 Notification flow

Define when and how you want to be notified.

4 Bulk notifications

To reduce the number of notifications, combine multiple successive notifications for the same contact into a single bulk notification that lists all current problems in, e.g., a single email.

5 Review & rule properties

Review your notification rule before applying it. They will take effect right away without "Activate changes".

1

Define host/service events

Define any host or service events you want to be notified about.

Host events..... From to ×

Service events... From to ×

From to ×

From to ×

1

Define host/service events

Define any host or service events you want to be notified about.

Host events..... From to ×

Service events... ×

-
-
- to ×
- to ×
- to ×

2

Specify hosts/service conditions

Concept - Work in Progress

Specify conditions to determine which hosts and which services will be affected by this notification rule.

▼ General

Service level.....

Select service level ... ▼

Folder.....

Main ▼

> Hosts

> Services



Next step: Notification flow



Previous step

Specify hosts/service conditions

Concept - Work in Progress

Specify conditions to determine which hosts and which services will be affected by this notification rule.

▼ General

Service level...

Folder.....

> Hosts



> Services



Next step:

▼ Hosts

Host tags.....

Select host tags ▼



Add tag condition

Host labels.....



Add label condition

Explicit hosts (Regex)

▼ Services

Service labels....



Add label condition

Explicit services (Regex)

3

Notification flow

Concept - Work in Progress

Define when and how you want to be notified.

Notify ... [\(Assign to contact groups\)](#)

+ Add to query

via

if ×

+ Add to query

↓ Next step: Bulk notifications

↑ Previous step

3

Notification flow

Concept - Work in Progress

Define when and how you want to be notified.

Notify ... [\(Assign to contact groups\)](#)

 Add to query

via

if ×

 Add to query

 **Next step: Bulk notifications**

 **Previous step**

Re-usable templates and connections

Contextually edit and create things



Concept - Work in Progress

via

email ▾

Select email template ▾ ×

Default (HTML)

Default (ASCII)



Edit templates

Re-usable templates and connections

Contextually edit and create things

Concept - Work in Progress

via

Microsoft Teams ▾

Select connection ▾ ×

No connections configured

 Add connection

3

Notification flow

Concept - Work in Progress

Define when and how you want to be notified.

Notify ... [\(Assign to contact groups\)](#)

 Add to query

via

if ×

 Add to query

 **Next step: Bulk notifications**

 **Previous step**

3

Notification flow

Concept - Work in Progress

Define when and how you want to be notified.

Notify ... [\(Assign to contact groups\)](#)

 Add to query

via

if ×

 Add to query

 **Next step: Bulk notifications**

 **Previous step**

3

Notification flow

Define when and how you want to be notified.

Notify ...

and th notification ×

Add to query

via

if ×

and ×

Add to query

Concept - Work in Progress

Bulk notifications

To reduce the number of notifications, combine multiple successive notifications for the same contact into a single bulk notification that lists all current problems in, e.g., a single email.

Bulk based on ... Folder
 Host
 Service description
 Service level
 Check type
 Host/Service state
 Event console contact
 Event console comment
 Custom macro

Bulk within hour min sec

Max. bulk size ... notifications per bulk notification

Subject ([Reset to default](#))

 **Next step: Review**

 **Previous step**

Concept - Work in Progress

5

Review & rule properties

Concept - Work in Progress

Review your notification rule before applying it. They will take effect right away without “Activate changes”.

Description

Setting

Disable rule

Allow users to deactivate this notification

Comment


Documentation ...



Apply & test notifications



Previous step



Updates for notification methods



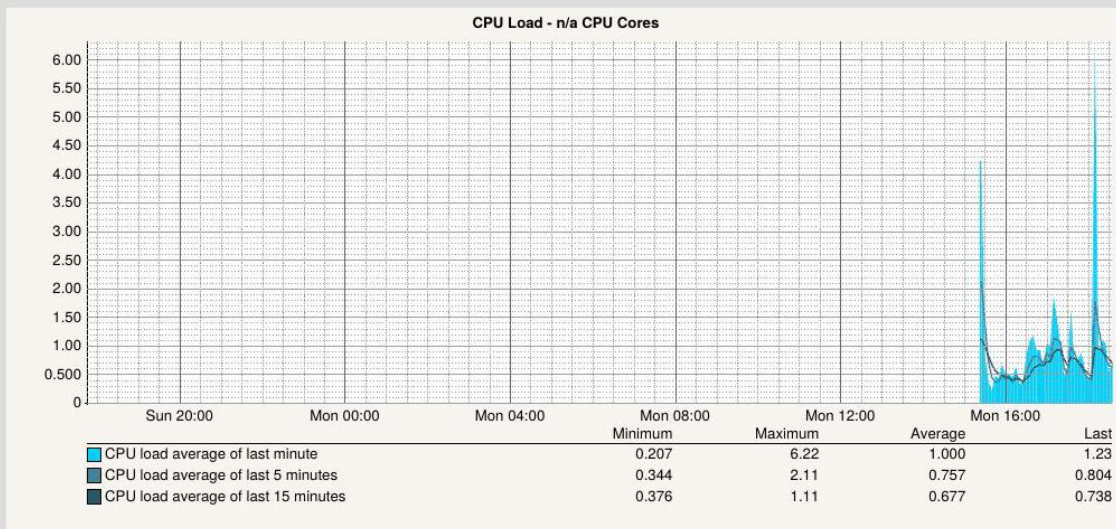


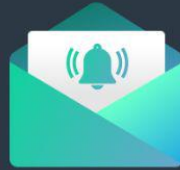
80%

**Users are using Checkmk
email notifications**

Host	backup44 (Backup-Server 44)
Service	CPU load
Event	OK → CRITICAL
Address	localhost
Date / Time	Mon May 25 18:41:51 CEST 2020
Plugin Output	
Additional Output	
Host Metrics	rta=0.030ms;200.000;500.000;0; pl=0%;40;80;; rtmax=0.043ms;;; rtmin=0.024ms;;;
Service Metrics	

Graphs





Host: backup44 (Backup-Server 44)

Service: CPU load

Event: OK → CRIT

[View the issue](#)

Details

Date / Time: Mon May 25 18:41:51 CEST 2024

Address: localhost



Focused: Most important info on top

Host: backup44 (Backup-Server 44)

Service: CPU load

Event:

OK



CRIT

[View the issue](#)

Details

Date / Time: Mon May 25 18:41:51 CEST 2024

Address: localhost

State: OK

Site: prod

Summary: 15 min load: 6.02 (ok/crit at 4.80/6.00) **CRIT**

Service details:

15 min load per core: 1.40 (4 logical core)

1 min load per core: 2.25 (4 logical core)

5 min load per core: 1.39 (4 logical core)

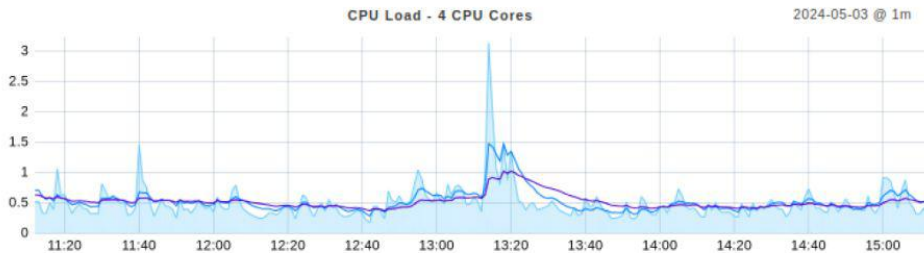


Focused: Most important info on top



Modern look and feel: "New" graphs

Graph



	Minimum	Maximum	Average	Last
CPU load average of last 15 minutes	0.37	1.02	0.52	0.51
CPU load average of last 5 minutes	0.29	1.48	0.53	0.48
CPU load average of last minute	0.17	3.14	0.5	0.3

Warning of CPU load average of last 15 minutes	20
Critical of CPU load average of last 15 minutes	40



+ Additional details

Host metrics: rta=0.030 ms — rtmx=0.043 ms

Service metrics: offset=0.002 ; 200 ; 500

Notification rule:

→ (#2) Notify all contacts of a host/service via HTML email

👤 Contact groups

- Test
- Main
- Main IT

🏷️ Service labels

state:bavaria

cmk/os_family:linux

🏷️ Host tags



Focused: Most important info on top



Modern look and feel: “New” graphs



Traceability: Rule that triggered the notification



Contact groups

- Test
- Main
- Main IT

Service labels

state:bavaria

cmk/os_family:linux

Host tags

checkmk-agent

checkmk-agent icon

ip-v4v6

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[Unsubscribe](#) [Manage preferences](#)



Focused: Most important info on top



Modern look and feel: “New” graphs



Traceability: Rule that triggered the notification



Informational: Service labels + Contact groups

Updates for...





A new home for notifications

Notifications







Setup > Events > Notifications

Concept - Work in Progress


Notifications **Related** Display Help

- + Add notification rule
- + Add email template
- 🧪 Test notifications
- 📊 Analyze recent notifications

▼ Email templates

#	Actions	Description	Type
0	  	Default (HTML)	HTML
1	  	Default (ASCII)	ASCII

▼ Failed notifications

 **3**
 Failed notifications

▼ Rules to optimize notifications

Monitor	
Check notification number per contact	0
Optimize notifications	
Business intelligence	0
Delay service notifications	0
Delay host notifications	0
Enable/disable notifications for services	0
Enable/disable notifications for hosts	0
Flap detection settings for services	0
Flap detection settings for hosts	0
Maximum number of check attempts for services	0
Maximum number of check attempts for hosts	0

▼ Connections

Configured





iLert	4
Jira (Commercial editions only)	1
Microsoft Teams	1
Slack or Mattermost	1

► **More connections**

▼ Core status of notifications

Site	Core status
central	✔ Notifications enabled
remote1	✔ Notifications enabled
remote2	⚠ Notifications disabled
remote3	✔ Notifications enabled

Global notification rules

#	Actions	Method	Type	Bulk	Description	Contacts	Conditions
0	   	email	✔	✔	Notify all contacts of host/service via HTML email	• all contacts of notified object	(no conditions)

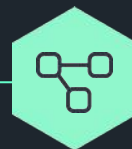
Same complexity, less complicated



All notification options closer together




Clear and descriptive configuration options




Contextually edit connected options, e.g., time periods



Re-use notification templates and connection



The notification approach

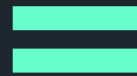




Your current starting point

Better more than less

Default rule	
Contacts	Conditions
<ul style="list-style-type: none">• all contacts of the notified object	<i>(no conditions)</i>



**Risking spam
+ alarm fatigue**

Allowlist your notifications

Proposal for a new paradigm



Principle: “Subscribe” to relevant events, hosts, services



No more “Default” rule: Each rule must be set intentionally



Avoid spam and alarm fatigue

Missing notifications!

Mitigating the risk



Extension of notification analysis:

Which events were generated resulting in NO notification?



Test notifications



“Fallback email address” still exists

Allowlist vs. Blocklist



Allowlist

- Only notify what is defined
- Only specified objects/events are actionable/of interested
- Risk of forgetting an object/event

Blocklist

- Better more than less
- Everything that is being monitored is important, except for specified objects/events
- Risk of spam and alarm fatigue

We are looking for your feedback & insights!

Soon: Usability tests and interviews around Notifications



To subscribe: **Scan the QR-Code** or visit **lists.checkmk.com** and look for “Checkmk user experience research”.



<https://lists.checkmk.com/mailman3/postorius/lists/ux-research.lists.checkmk.com/>

