

# News in the Micro Core (CMC)



# #8273

## Recurring Scheduled Downtimes



## Motivation

- Required downtimes on a regular base

## Old Situation

- Scheduled Downtimes just happen once
- Notification period clumsy in handling ...
- ... and not filtered out in problem views



## New Recurring Scheduled Downtimes

- These are normal scheduled downtimes
- They automatically repeat themselves
- Done by CMC - **no** cron job is needed

They come in two flavours...

# 1. Adhoc via command

▼ Downtimes

Schedule downtimes .....

Downtime Comment: Regular reboot of server

From now for 60 minutes

2 hours Today This week This month This year - Remove all

Custom time range 2015-10-22 2:00 to 2015-10-22 4:00

- flexible with max. duration 02:00 (HH:MM)
- Schedule downtimes on the affected **hosts** instead of on the individual services
- Repeat this downtime on a regular base every week (This only works when using CMC)



## 2. Via rule set!

▼ Recurring downtimes for services

Comment for the downtime

First time the downtime starts  
Year Month Day Hour Minute Sec.

Repeat this downtime

Duration  
 hours  mins

☐ Flexible start time

## **Advantages of „via command“**

- can be done by operator
- no WATO permission needed
- no „Activate Changes“
- same interface as for normal downtimes

## **Advantages of „via rule set“**

- Easy to handle a large number of objects
- Also works for future hosts/services!!

# #8275

## Alert Handlers



- Perform actions upon alerts
- Independent of notifications
- Can appear on soft state changes
- Can also be triggered at **every** check execution



Usage:

- Repair things!





## Rule based configuration

► General Properties

▼ Alert Handler

Alert Handler ..... Name of the script

Call with the following parameters:

▼ Matching

Folder ..... ☐

Match Host Tags ..... ☒ Agent type:

Criticality:

Networking Segment:

monitor via SNMP:

monitor via Check\_MK Agent:

Match Host Groups ..... ☐

Match only the following hosts ..... ☐

Exclude the following hosts ..... ☐

Match Service Groups ..... ☐

Match only the following services ..... ☐

Exclude the following services ..... ☐

Match host event type ..... ☐

Match service event type ..... ☐

Restrict to n<sup>th</sup> to m<sup>th</sup> check attempt ..... ☐



Handlers can be

- scripts (just like notifications)
- inline Python code



# #8301

**cmcdump**: New tool for offline mirroring  
satellite sites into a central site



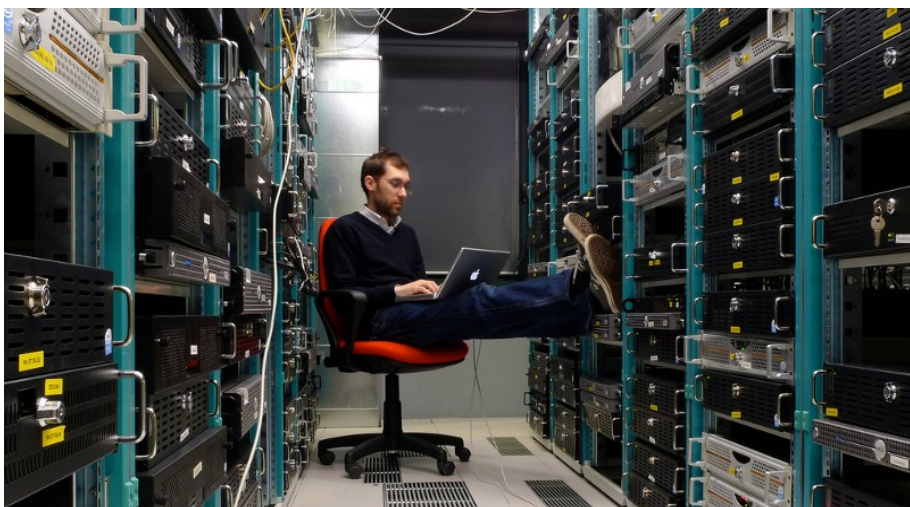
A new way of distributed monitoring  
with CMC



- Highly separated networks?
  - No access from central site to satellites?
- cmcdump might be your solution!



## Remote Site



## Central Monitoring



Step 1: Bring hosts & services to central site

```
cmcdump -C > file.mk
```

```
mv file.mk etc/check_mk/conf.d  
cmk -0
```

Step 2: Regular transport of current monitoring state

```
cmcdump > state
```

```
unixcat < state > tmp/run/live
```



## **These things are handled correctly:**

- The actual state (PEND, OK, WARN, ...)
- The plugin output
- The long (multiline) plugin output
- The performance data
- Whether the object is flapping and the current level of flappiness
- The time of the last check execution
- The time of the last state change
- The check execution time
- The check latency
- The number of the current check attempt
- Whether the current state is hard or soft
- Whether a problem has been acknowledged
- Whether the object is currently in a scheduled downtime





## **Downtimes & Acknowledgments**

- are being synced correctly, but....
- are handled on the remote site!





## **Advantages over Multisite**

1. Does not need network access!  
(files could even be transported via email)
2. Hm...
3. Still thinking...
4. Seems that was it.



## Disadvantages

1. Central site can just view, not act
2. Additional latency due to transfer period
3. No central configuration
4. Transfer need to be scripted by you

## New Level 2 Werks:

- #8093 New option for expiration of acknowledgements
- #8065 Direct any verbose or diagnostic output from check\_mk or checks to cmc.log
- #8129 Create log entries for acknowledgements in monitoring log
- #8156 New option for forcing a history logfile rotation based on its size
- #8243 Handle and display information about cached agent data in GUI
- #8294 Errors in configuration do not prevent the core from being restarted anymore
- #8295 Automatically create backup of state file if state shrinks by more than 5% in size

## **New Level 1 Werks:**

#8059 New In-Memory-Cache for availability data is now enabled by default

#8101 Take check period into account when computing the staleness

#8131 Log errors of the RRD creation process into the cmc.log

#8132 New tuning of SMART ping - throttling of PING rate

#8186 The cmc sets HOSTNOTESURL and SERVICENOTESURL for notification plugins

#8306 Log stack trace in case of crash of CMC

# Reporting & Availability



# #8090

## **Report Scheduler**

automatically email reports  
on a regular base




## General Options

▼ General Options

|  |  |
|--|--|
| Report to create .....                       | BI Availability  |
| Title .....                                  | <input type="text" value="Weekly report on email system"/>   |
| Activation .....                             | <input type="checkbox"/> do not create this report   |
| Period .....                                 | <input type="text" value="Every week on..."/> <input type="text" value="Monday"/>  |
| Time of day to create report at .....        | <input type="text" value="11:00"/>   |
| Time range to create report for .....        | <input type="text" value="Last week"/>   |
| Email-Addresses to mail PDF reports to ..... | <input type="text" value="chef@firma.de"/><br><input type="text" value="myself@firma.de"/><br><input type="text"/>   |
| Run report as this user .....                | <input type="text" value="omdadmin - omdadmin"/>   |
| Options for report emails .....              | <input type="checkbox"/> From: email address<br><input type="checkbox"/> Reply-To: email address<br><input type="checkbox"/> Subject<br><input type="checkbox"/> Filename for attached PDF |

## Select Context

▼ Context / Search Filters

|                      |   |                             |
|----------------------|---|-----------------------------|
| Comment .....        | <input type="text"/>  | <button>Add filter</button> |
| Service Group .....  | <input type="text"/>  | <button>Add filter</button> |
| Log Entry .....      | <input type="text"/>  | <button>Add filter</button> |
| Service .....        | <input type="text"/>  | <button>Add filter</button> |
| BI Aggregation ..... | <div>Aggregation name </div> <div>Email System</div> |                             |

## Reporting

#8123 Fix broken layout of detail pages, add host details to example report

#8158 New table layout for reporting

## Availability

#8159 Reporting now can show inline timeline and legends of availability views

#8222 Timeline bar and/or the detailed timeline can be rendered in a report

#2301 Availability now allows to just show rows with outage times above certain levels

#2302 Availability: new option in "Labelling" for omitting legend for availability levels

#8296 More precise availability handling of removed and readded objects

#8244 Availability in reporting now supports visual availability levels

# News in the Notification System





## **#2135 Allow to filter notification contacts based on custom macros**

# #2135 filter contacts

▼ 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 in their profile

The following users ..... ☐

The members of certain contact groups ☐

The following explicit email addresses ☐

Restrict by custom macros ..... ☒

 Name of the macro

Required match (regular expression)



## **#2195 New condition "Match Contacts" in rule based notifications**



# #2195 Match Contacts

Match Contacts ..... ☒  region - Region Admin ▼

Match Contact Groups ..... ☒

Match service level ..... ☐

Add contact

Available < > Selected

|              |           |
|--------------|-----------|
| Global Admin | Everybody |
| Region Admin |           |



## LEVEL 2

#2195 New condition "Match Contacts" in rule based notifications

## LEVEL 1

#2135 Allow to filter notification contacts based on custom macros

#2188 Rule based notification now allow match for notification comment

#2200 filter for (de-)selecting preliminary notifications to "check-mk-notify"

#2304 Bulking: now able to configure the notification sort order in emails

#2432 Forwarded notifications are now visible within the analysis

#2478 Notification plugin for mobile phone push messages via Pushover



# Check\_MK Appliance News



- You can enable HTTPS and disable HTTP
- More user friendly:
  - Enable HTTP and redirect to HTTPS

**Web Access** Web Configuration

[Back](#) [New Certificate](#) [Upload Certificate](#)

▼ **Configure Web Access Modes**

Web access mode ..... HTTP only (default) ▼

[Save](#)

**Current State**

|       |          |
|-------|----------|
| HTTP  | Active   |
| HTTPS | Inactive |

**Current Certificate**

There is currently no certificate available. You need to install a certificate to have HTTPS enabled. Take a look at the documentation for details.

- System-Apache is being configured
- Generate key on the device
- Self-sign or download CSR
- Upload keys and signed certificates



Gerätename (Common Name)  
10.1.2.9

☐ Weitere Gerätenamen (Subject Alternative Names)

E-Mail-Adresse  
lm@mathias-kettner.de

Landeskürzel (2 Zeichen)  
DE

State (z.B. Bundesland)  
Bavaria

Lokalität (z.B. Stadt)  
Munich

Organisation (z.B. Firmenname)  
Mathias Kettner GmbH

☐ Organisationseinheit (z.B. Abteilung)

Signaturmethode  
Eine Zertifikatsregistrierungsanforderung erstellen (CSR)

# Native support for HTTPS 3/3

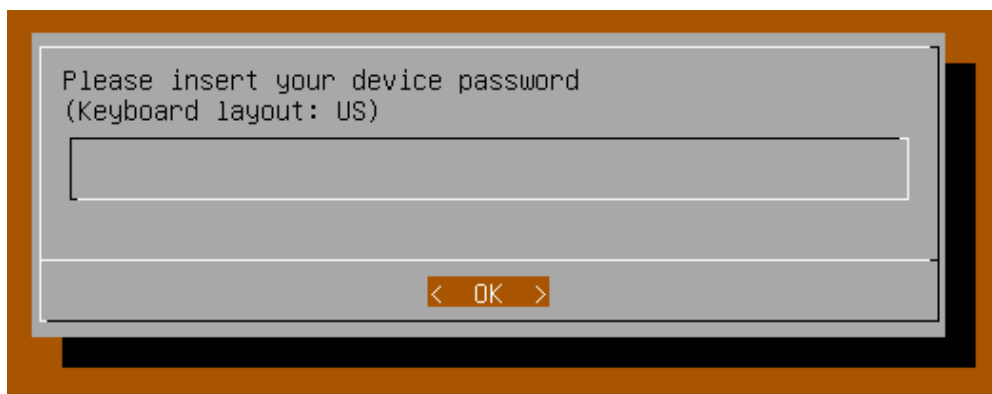
| Aktueller Zustand       |   |
|-------------------------|---|
| HTTP                    | aktiv   |
| HTTPS                   | aktiv   |
| Aktuelles Zertifikat    |   |
| Signiert für            |   |
| Land                    | DE  |
| State (z.B. Bundesland) | Bavaria   |
| Lokalität               | Munich  |
| Organisation            | Mathias Kettner GmbH  |
| Gerätename              | cma.local   |
| Signiert von            |   |
| Land                    | DE  |
| State (z.B. Bundesland) | Bavaria   |
| Lokalität               | Munich  |
| Organisation            | Mathias Kettner GmbH  |
| Gerätename              | cma.local   |
| Gültigkeit              |   |
| Gültig ab               | 2015-07-21 10:38:34   |
| Gültig bis              | 2017-07-20 10:38:34   |
| Details                 |   |
| Signaturalgorithmus     | sha1WithRSAEncryption                                       |
| Fingerabdruck (SHA1)    | FE:D0:BD:76:33:4B:B6:94:B0:5C:D6:33:BB:2C:F1:1B:E2:12:B5:A0 |
| Schlüssellänge          | 2048 bits   |



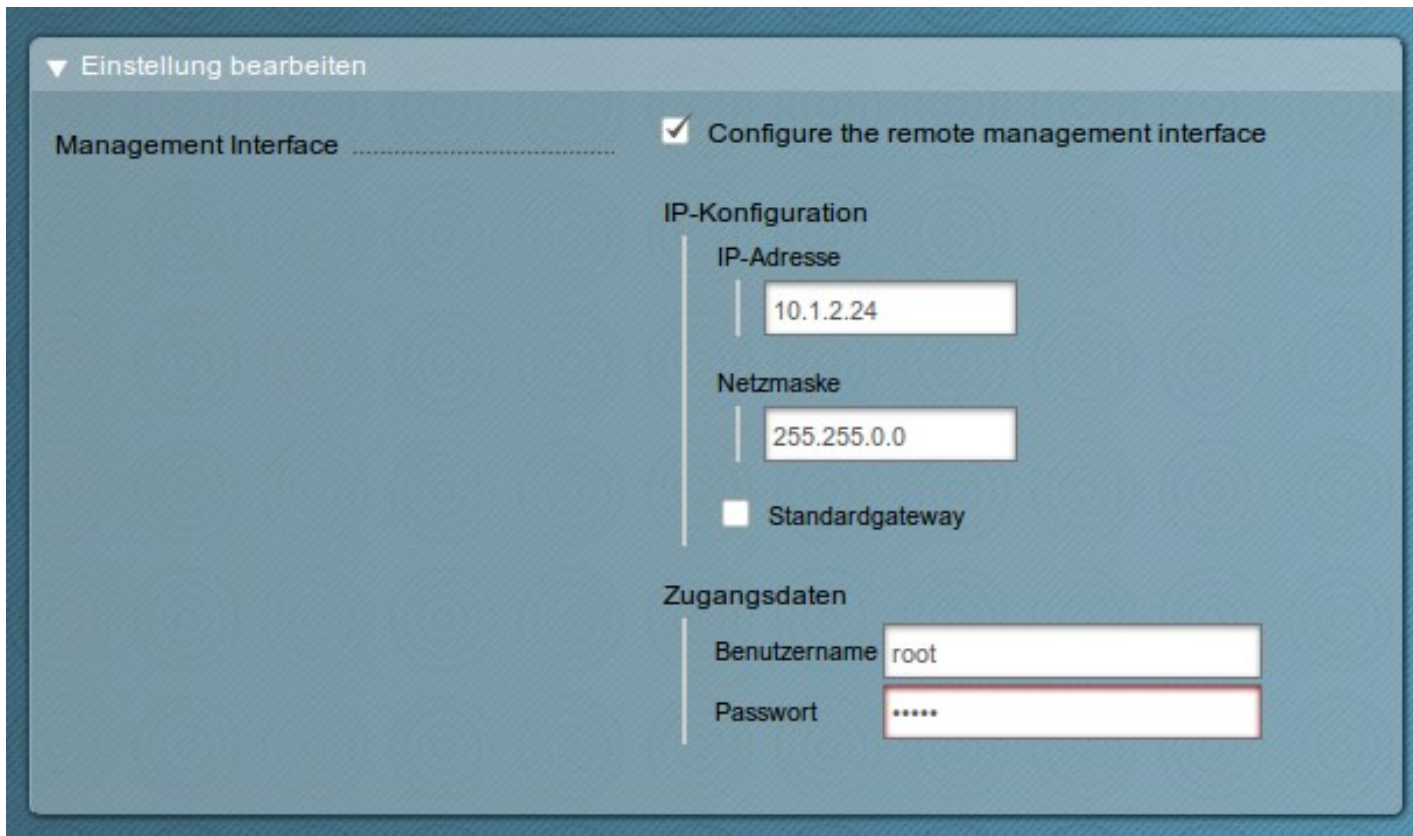


## Protect access to the Local Console

- Configured via Console
- Automatically locks after 5 minute idle



- Remote Management Interface (IPMI) of Check\_MK rack1 is now configurable



The screenshot shows a web interface for configuring the Remote Management Interface (IPMI) for Check\_MK rack1. The interface is titled "Einstellung bearbeiten" (Edit settings) and has a section for "Management Interface". A checkbox labeled "Configure the remote management interface" is checked. Below this, the "IP-Konfiguration" (IP configuration) section contains fields for "IP-Adresse" (IP address) set to "10.1.2.24" and "Netzmaske" (Subnet mask) set to "255.255.0.0". There is also an unchecked checkbox for "Standardgateway". The "Zugangsdaten" (Access data) section contains fields for "Benutzername" (Username) set to "root" and "Passwort" (Password) masked with "\*\*\*\*\*".

## Additional features

- Supporting CEP HT63e UMTS/GSM SMS modem
- Supporting network connected SMS modem
- Administrative Email address can now be configured for sites
- You can now configure DNS search domains
- Advanced Network Config: Added option to revert the currently pending changes
- Check\_MK virt1 now supporting Citrix Xen Server and Hyper-V as host system

- Logs of web server can be viewed via log page
- Bonding interface list shows the bonding mode
- Put info about keyboard layout to pw input dialogs
- Showing name of the appliance in web page titles
- Display "updating firmware" dialog during updates
- Added NaviSphere for EMC VNX monitoring



## **Currently in development**

- 64bit-Firmware
  - Makes migration easier
  - Needs new Check\_MK rail model

## **Planned for the near future**

- VLAN-Configuration via GUI
- Backup- and Restore-Solution





**PAUSE / BREAK**