

A Support Diagnostic for Checkmk

CHECKMK CONFERENCE #6 – MUNICH, APRIL 29, 2020



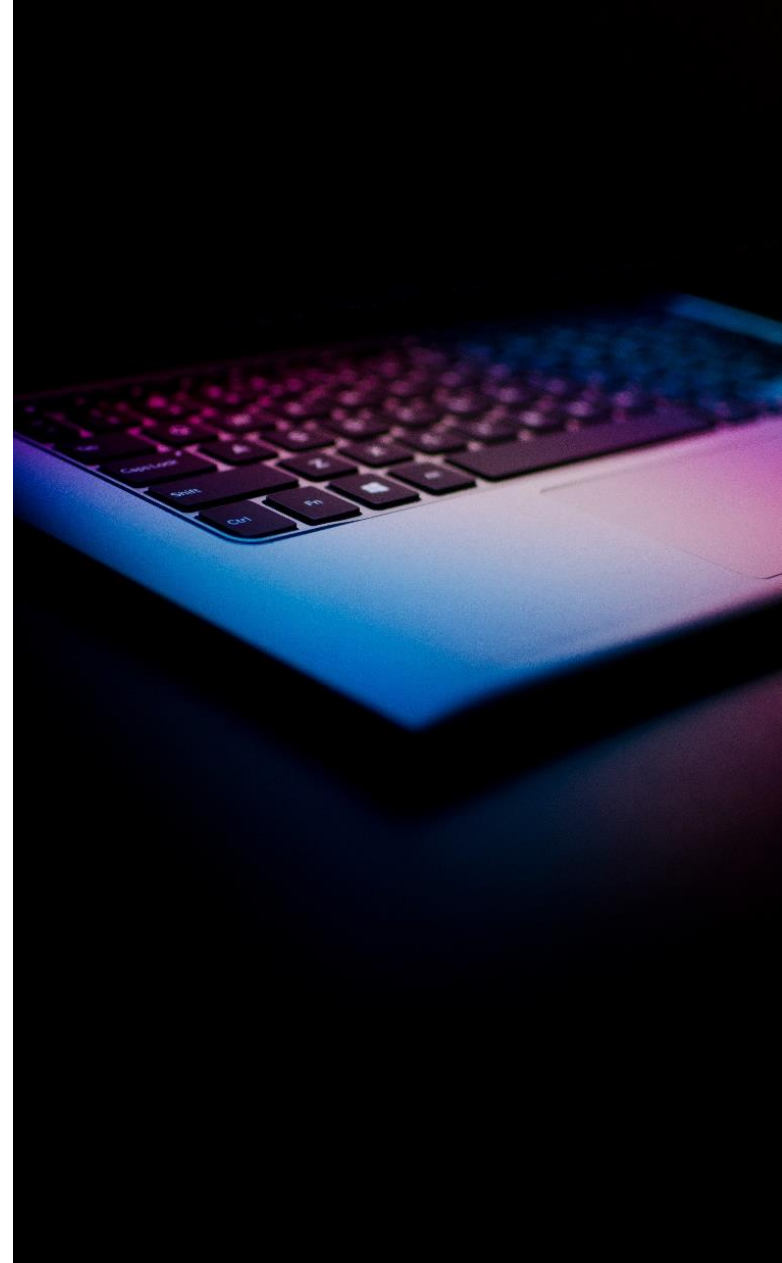
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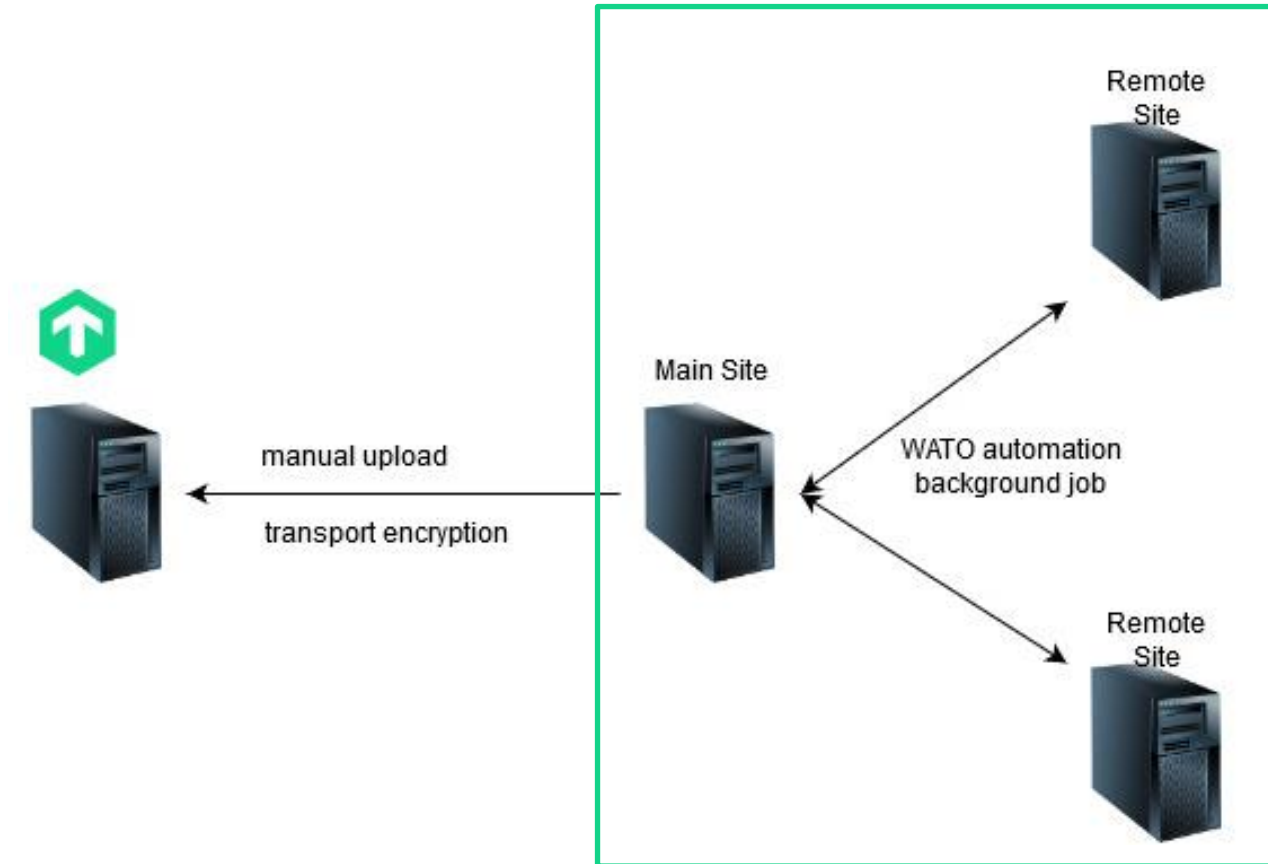
Why a support diagnostic?

Expedites problem diagnosis and resolution by

- basic system information available upfront in standard format
- reduce number of requests "please send me additional data"
- simplified data gathering by problem type
- visibility of dependencies and incompatibilities
- basic usage statistics (optional)



Architecture



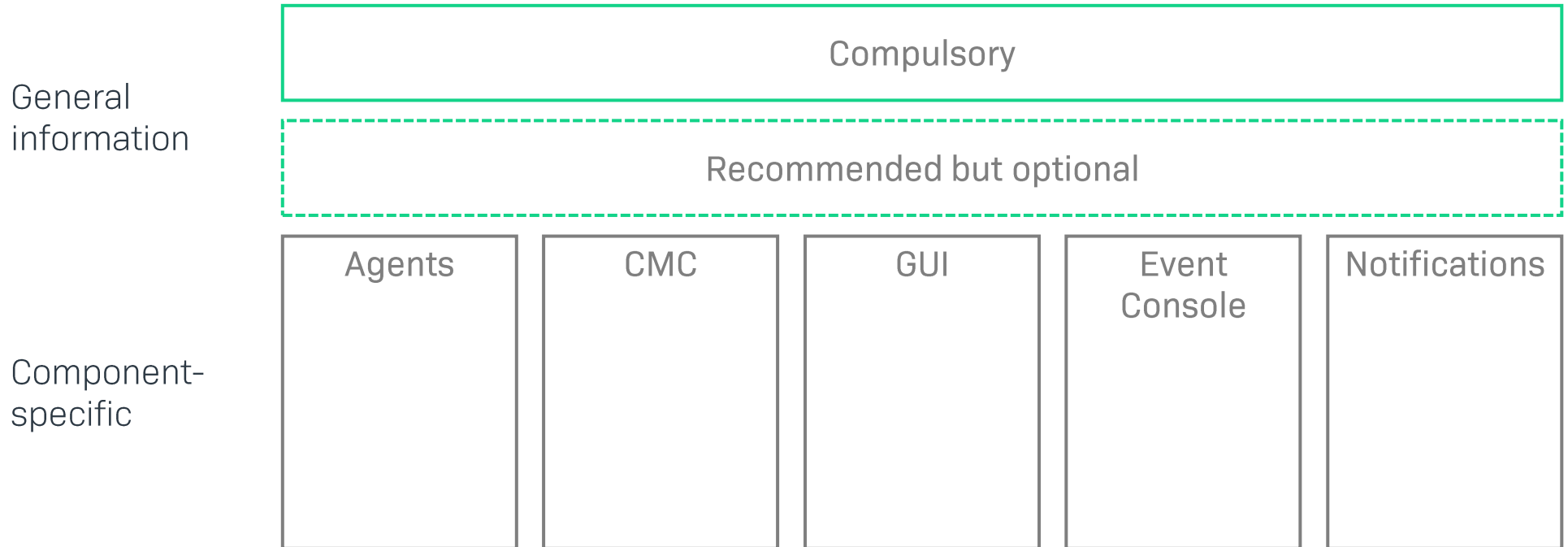
- Generate diagnostic data via WATO
- WATO automation to create data bundle via background job from selected site
- Cleanup up job
- No automated upload to tribe29
- Upload tarfile to
 - <https://support.checkmk.com/>
 - <https://cloud.checkmk.com/>
 - Your support partner

Security



- The role cmkadmin has permissions to create and read the diagnostic data
- Full transparency of collected data
- Transfer manually to tribe29 via SSL
- Highlighting and masking sensible data (level needs to be determined)
- Encryption of the data bundle

Pre-defined data collection, most 'de-selectable'



Data to collect: General information

General information

- OS version
- Checkmk version and edition
- Python version and path
- Date and time
- omd config show
- Performance reports
- Analyze configuration

Recommended, but optional

- mkp find
- mkp list
- find -L ~/local

Data to collect by affected component (I)

Event console

- EC Log
(var/log/mkeventd.log)
- EC Configuration
(etc/check_mk/mkeventd.mk)

Agents

- `cmk -D HOST`
- `cmk -d HOST`
- `cmk -snmpwalk HOST`
- `cmk -v -debug --checks CHECK HOST`
- Debug output special Agents

GUI

- var/log/web.log
- var/log/apache/access.log
- var/log/apache/error.log

Data to collect by affected component (II)

Notifications

- var/log/mknotifyd.log
- var/log/mknotifyd.state
- var/log/notify.log
- var/log/cmc.log
- etc/check_mk/conf.d/wato/notifications.mk
- etc/check_mk/multisite.d/sites.mk

CMC / Livestatus

- var/log/cmc.log
- var/log/liveproxyd.log
- var/log/liveproxyd.state
- var/check_mk/core/config
- var/check_mk/core/state
- Number of helpers
- Livestatus proxy parameters

Graphical configuration in WATO: Selection

The screenshot shows the WATO Diagnostics configuration interface. On the left is a dark sidebar with a navigation menu. The main content area is titled 'Diagnostics' and contains a 'Main Menu' button at the top. Below it is a section for 'COLLECT DIAGNOSTIC DUMP' with a dropdown menu set to 'daily - Local site daily'. There are two sections: 'General information' with the text 'Collect information about OS and Checkmk version' and 'Optional information' with the text 'There are no elements defined for this selection'. A green 'Start' button is located below the information sections.

checkmk Enterprise 2020.04.16

Other ... EDIT

WATO - CONFIGURATION - x

- Main Menu
- Monitoring Agents
- Hosts
- Tags
- Global Settings
- Host & Service Parameters
- Manual Checks
- Check Plugins
- Host & Service Groups
- Users
- Roles & Permissions
- Contact Groups
- Notifications
- Time Periods
- Event Console
- Business Intelligence
- Distributed Monitoring
- Backup
- Passwords
- Alert Handlers
- Analyze configuration
- Background jobs
- Diagnostics
- Extension Packages
- Logfile Pattern Analyzer
- Custom Icons

Main Menu

COLLECT DIAGNOSTIC DUMP

Site daily - Local site daily

General information Collect information about OS and Checkmk version

Optional information There are no elements defined for this selection




Start

- Select side
- Choose diagnostic data
- Compulsory
 - OS and Checkmk version
 - Python version and path
- Recommended, but optional
- Issue specific
 - some de-selectable
 - maskable

Graphical configuration in WATO: Download

Background job details

cmkadmin (admin) 07:38 

← Back	
ID	diagnostics_dump
Title	Diagnostics dump
Started	2020-04-22 07:38:08
Owner	cmkadmin
Actions	
State	finished
Runtime	0:00:01
PID	2896
Result	 Creating dump file successfully
Progress Info	<pre>Diagnostics dump started... Collect diagnostics information: General: OS, Checkmk version and edition, Time, Core, Python version and paths Dump file: /omd/sites/daily/var/check_mk/diagnostics/235d6ed8-2a1f-4ecb-958f-c629f4914a25.tar.gz  Creating dump file successfully</pre>

- Progress
- Data collected
- Archive location
- Download button for the archive

Alternative: CLI (command-line interface)

- CLI is limited to the local site
- Options to collect additional data

```
daily@debian:~/var/check_mk/agnostics$ cmk --create-diagnostics-dump
Collect diagnostics information:
  General: OS, Checkmk version and edition, Time, Core, Python version and paths
Created diagnostics dump:
  'var/check_mk/agnostics/4bad43ff-1569-4d63-9bf8-31b0b13b6efa.tar.gz'
daily@debian:~/var/check_mk/agnostics$
```

```
daily@debian:~/var/check_mk/agnostics$ tar -xvzf 4bad43ff-1569-4d63-9bf8-31b0b13b6efa.tar.gz
general.json
daily@debian:~/var/check_mk/agnostics$
```

```
daily@debian:~/var/check_mk/agnostics$ cat general.json
{"time": 1587550058.1933115, "os": "buster", "version": "2020.04.21", "edition": "cee", "core": "cmc\n", "python_version": "3.7.4 (default, Dec 20 2019, 13:53:12) \n[GCC 8.2.0]", "python_paths": ["/opt/omd/versions/2020.04.21.cee/bin", "/omd/sites/daily/local/lib/python3", "/omd/sites/daily/lib/python37.zip", "/omd/sites/daily/lib/python3.7", "/omd/sites/daily/lib/python3.7/lib-dynload", "/omd/sites/daily/lib/python3.7/site-packages", "/omd/sites/daily/lib/python3"]}daily@debian:~/var/check_mk/agnostics$
```

Roadmap

- Support Diagnostic is part of Checkmk 1.7
- Diagnostic bundle covers multiple sites
- Upload via form to tribe29
- Encryption of the data bundle
- Masking sensible data
- Enhance issue types



Feedback

PLEASE USE [HTTPS://CHECKMK.DE/CONTACT.PHP](https://checkmk.de/contact.php) -
FEEDBACK

Thank you



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