

CHECK_MK

CONFERENCE #3



CHECK_MK
CONFERENCE #3

Check_MK Development

Lars Michelsen



The development team

- 9 developers (+2 starting from Q3)
- The check team (3 developers)
- Head of development

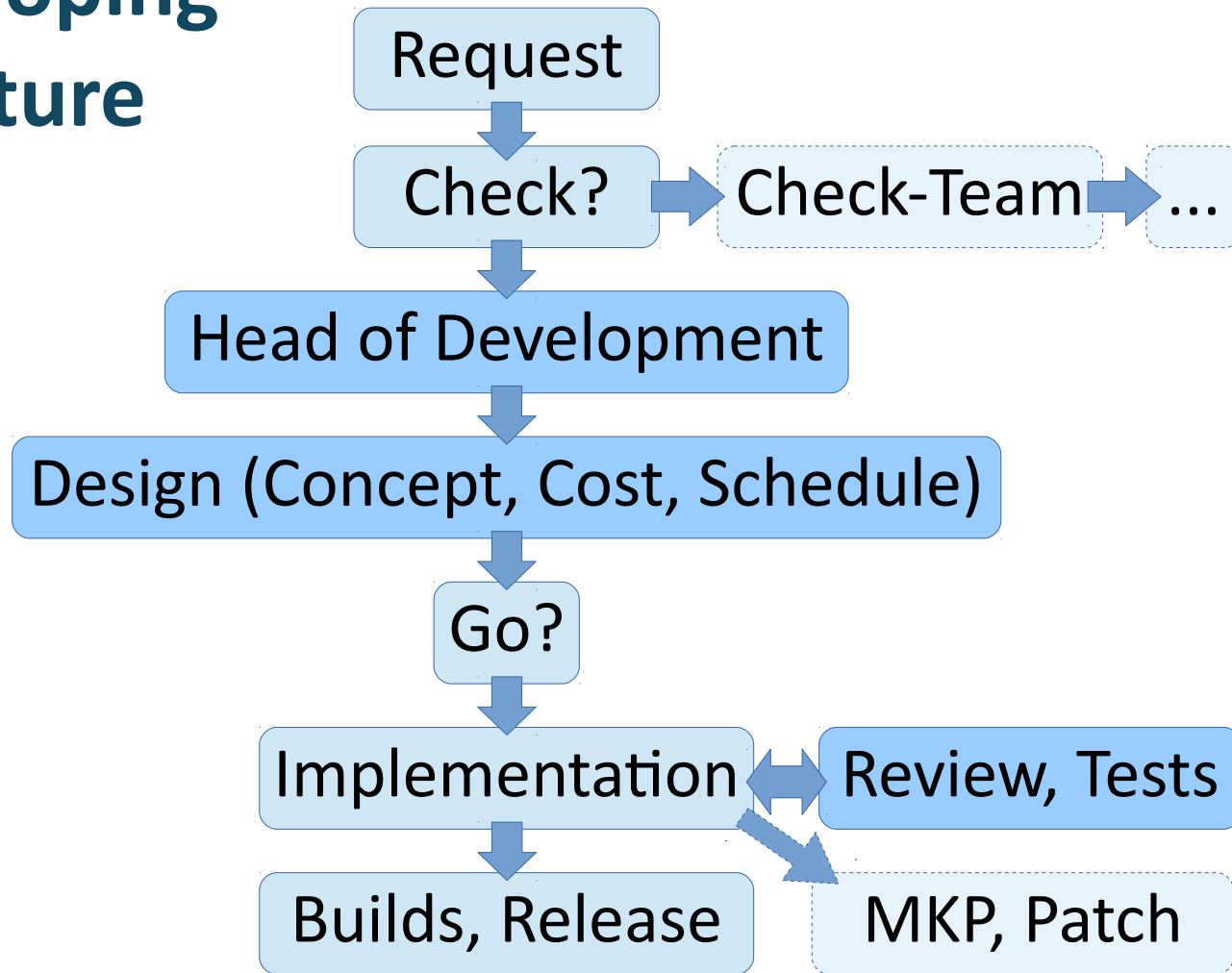




Developing a Feature



Developing a Feature





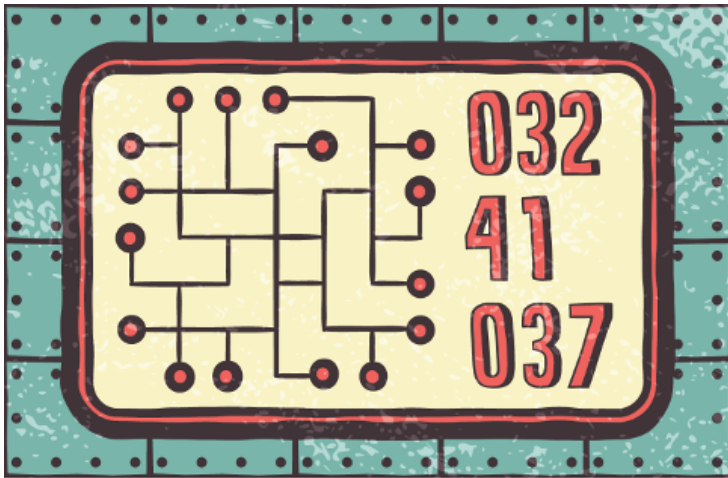
Bugs and other issues



Bug reports

- Ticket or feedback mail
 - Ticket → prioritized fix
- Feedback
 - 2 month backlog
 - Most activity before stable release





Quality



QA: Review via Gerrit

	Andreas Boesl	Uploaded patch set 1.
	Jenkins	Patch Set 1: Build Started https://ci.mathias-kettn
	Andreas Boesl	Patch Set 1: Kurz zum drüberschauen. Das war BI
	Jenkins	Patch Set 1: Verified+1 Build Successful https://ci .
	Lars Michelsen	Patch Set 1: (1 comment) Noch eine Anmerkung
	Andreas Boesl	Uploaded patch set 2.

```
51      h = '<table><tr>'
52      if perc_used + perc_uncommitted <= 100:
53          # Regular handling, no overcommitt
54          h += perfometer_td(perc_used, "#00ffc6")
55          h += perfometer_td(perc_uncommitted, "#ecccff")
56          h += perfometer_td(perc_totally_free, "white")
54      data = [(perc_used, "#00ffc6"),
55              (perc_uncommitted, "#ecccff"),
56              (perc_totally_free, "white")]
```



QA: Tests via Jenkins

Python						
S	W	Name ↓	Last Success	Last Failure	Last Duration	
		Bandit	36 min - #1111	N/A	3 min 49 sec	
		GUI-Crawl	2 days 20 hr - #753	N/A	13 min	
		Integrationstests	36 min - #2294	2 days 23 hr - #2290	9 min 4 sec	
		PyLint	45 min - #3591	20 hr - #3590	9 min 18 sec	





QA: Various actions

- Reduce complexity
 - Single Python version
 - Ship dependencies (single version)
- Move common code to libraries
- Refactor grown code
- Extend automated tests



Versioning scheme

- 1.2.7i3 → 1.2.8b1

Removed odd to even step between innovation and beta phase

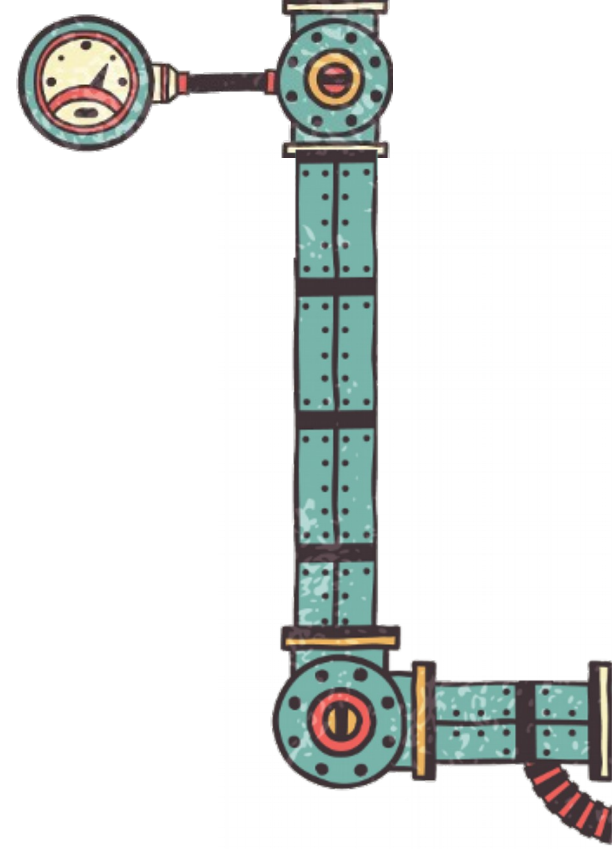
- Don't fear 2nd level increment!

1.2.8 → 1.4.0

- Only even numbers for stable versions?

Next will be 1.5.0

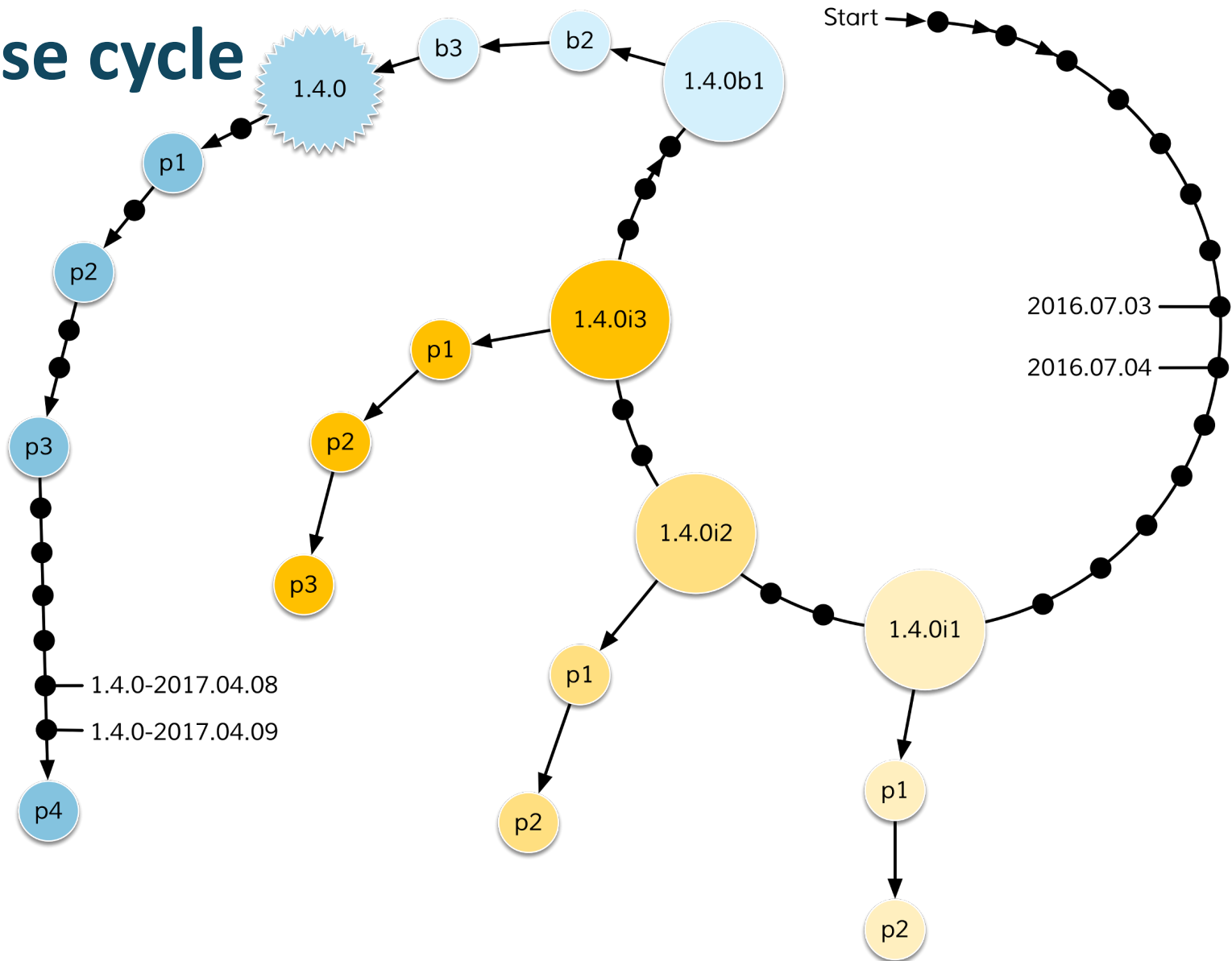




Cycle of Releases



Release cycle



Maintenance phases

- Active maintenance
 - Security + Bug fixes
 - Regular fix releases
- Passive maintenance
 - Fixes and releases on customer request



Maintenance intervals

- Daily: No maintenance releases
- Innovation
 - 1 - 2 months active maintenance
 - 1 - 2 months passive maintenance
- Stable
 - 1,5 years active maintenance
 - 1,5 years passive maintenance



Linux Distributions



Supported Distributions

- Major distributions are supported
- Covering vendor maintenance
- Extending on demand
- 32-bit support will be dropped soon



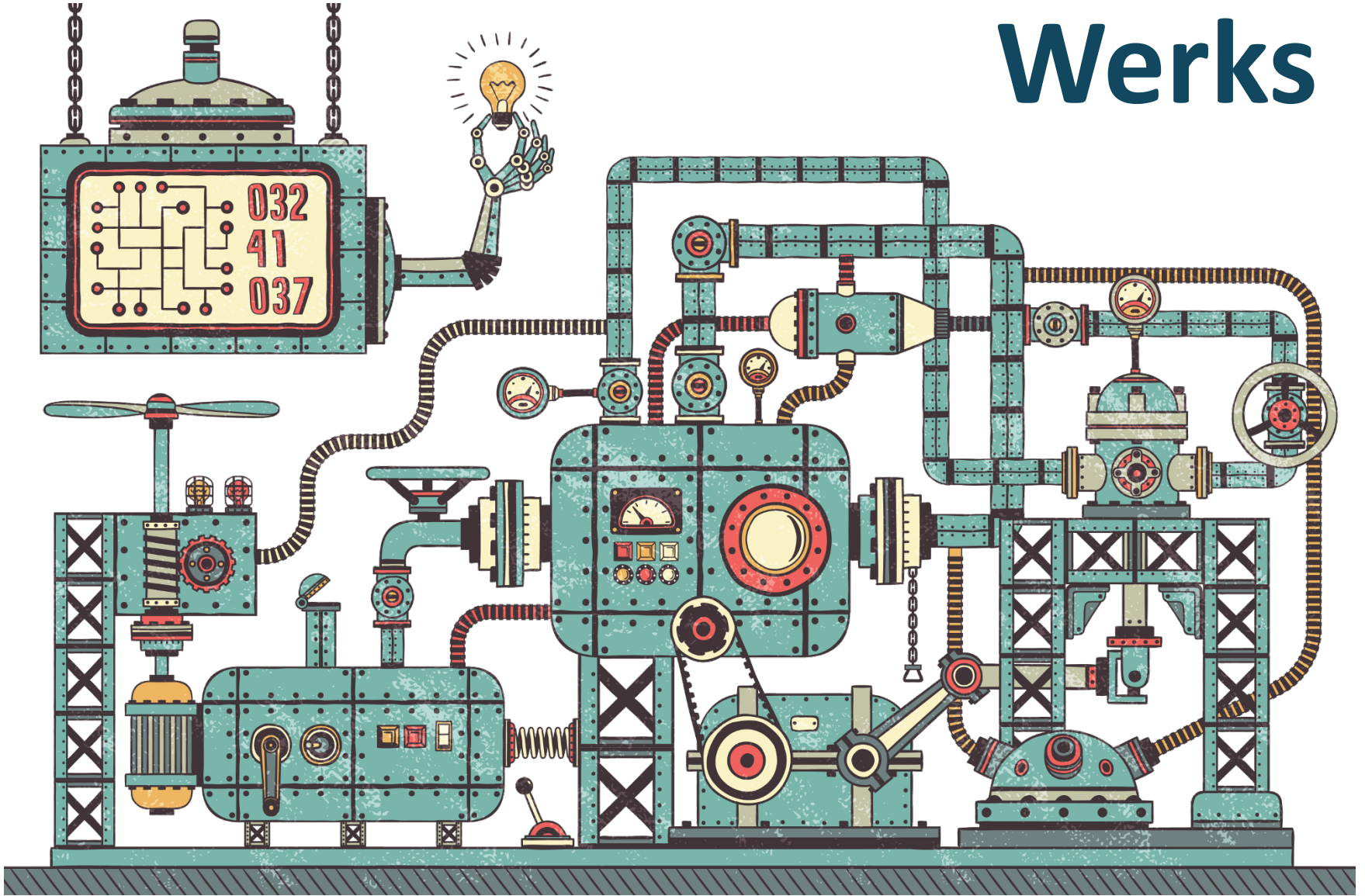
CHECK_MK
CONFERENCE #3

Check_MK OMD News

Sven Panne



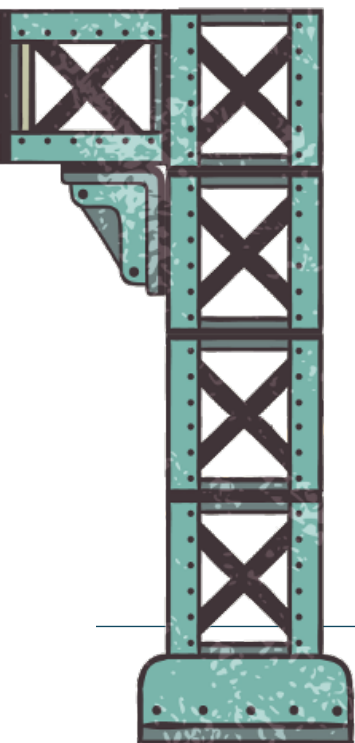
Werks



New Feature-Werks

#7563 #7569 #7590





Werk #7563 Online Backup

Check_MK Conference #3 - Check_MK OMD News

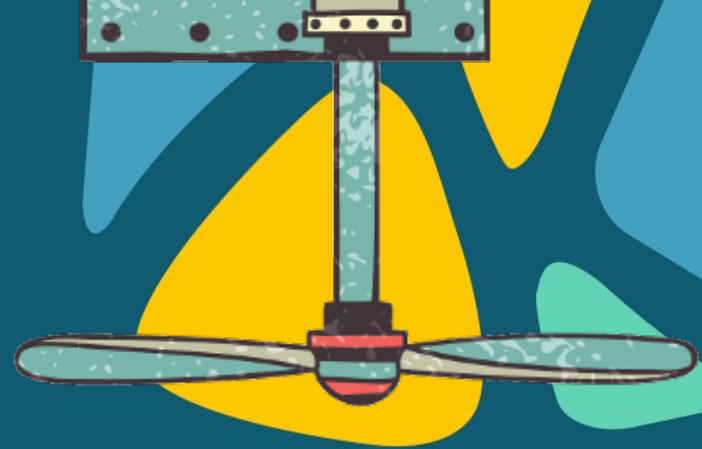


Online Backup



- Desirable: Site backup without stopping the site
- Problem: rrdcached continuously writes data to RRD files
- Solution: Extend rrdcached with new commands:
 - SUSPEND <file>, SUSPENDALL
 - RESUME <file>, RESUMEALL





Werk #7569



Sometimes housekeeping is necessary

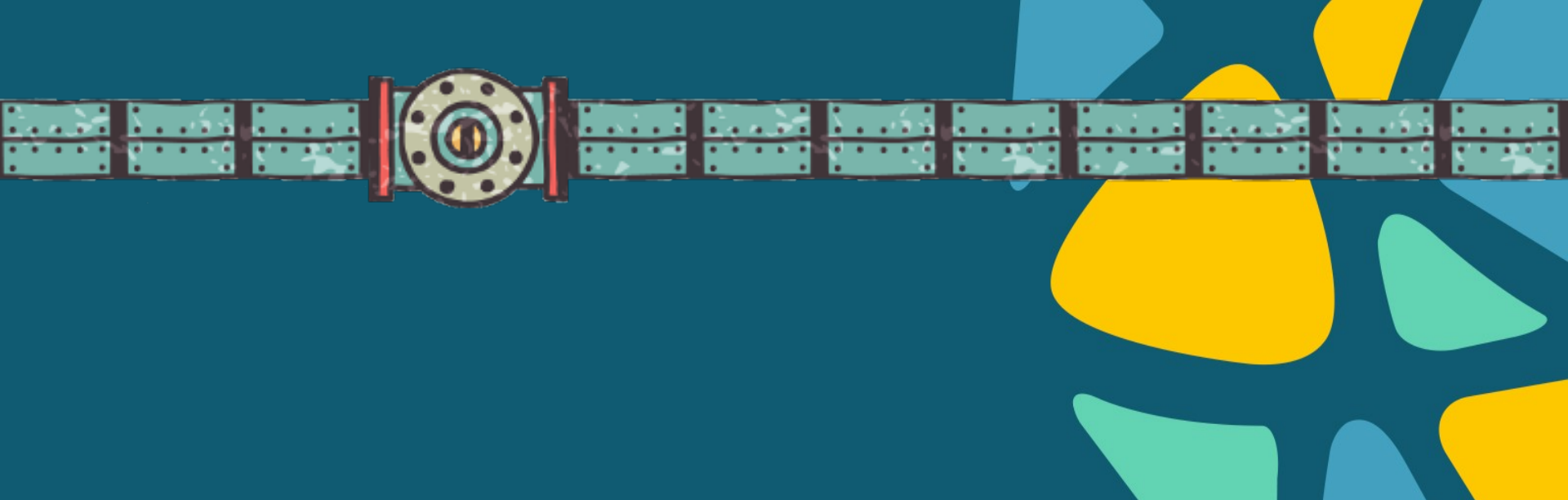
- Hosts have been moved or deleted manually
- RRDs do not receive any new data because a check changed or its host/service was deleted
- Lots of ancient uninteresting history data piles up
- Inventory archive contains old stuff



Don't fear: We have a cron job now...

- Remove data older than a given age
- Incrementally remove old data until enough space is free
- Remove abandoned host data (enabled by default: older than a month)
- Easily configurable via WATO's site management





Werk #7590 Shipping pythonTM



Python in Check_MK

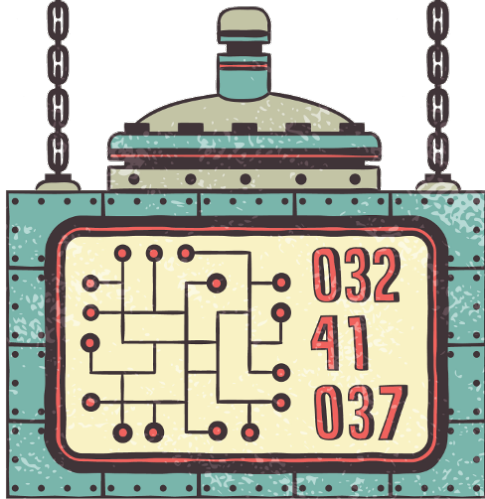
- Previously we used the platform's Python
 - Wide range from 2.4.3 to 2.7.13
 - Lots of changes in the language and underlying libraries
- Now we ship known, recent versions of
 - Python (2.7.13)
 - a set of 33 additional packages



Benefits

- Reduced complexity and testing effort
- Easier and better customer support
- Simpler development for us *and* our customers
- Just remember: Use `#!/usr/bin/env python`
- Bonus: pip works in site!





OS Support and Integration



A decade of distributions

- Added support for recent distributions
 - Ubuntu 16.10 (yakkety) / 17.04 (zesty)
 - Debian 9 (stretch)
 - SLES 12 SP2
- We still support CentOS 5
- Install omd as a systemd service when appropriate



Maintaining a Distribution



Problems

- Old SW potentially has more bugs, is more insecure, and has less features.
- New SW has a tendency to drop support for old distributions/libraries.
- Open Source SW and old LTS distributions are not a good fit
- Example CentOS 5: 10 years old, no TLS 1.2



Finding a middle ground

- Ship 27 packages/modules with 88 patches
- Track some security patches from distros
- Re-enable dropped distro/library support
- Fix evil bugs: Race conditions, edge cases, ...
- Implement a few new tiny features



CHECK_MK
CONFERENCE #3

News from the User Manual

Mathias Kettner



*„Niemand ist weiter von der Wahrheit entfernt
als derjenige, der alle Antworten weiß.“*

Zhuangzi



Writing a **good** user manual is
hard but necessary!



You surely know manuals like this:

Open:

- *Here you can open a new file*

Save:

- *Here you can save your file*

Print:

- *Here you can print your file*

...





Targets of the Check_MK User Manual

We want it to be

- precise
- complete
- **helpful**
- **fun to read!**



Situations in which you access the manual

- Acquaint yourself with a certain topic
- Get information you need for a concrete task
- Evaluate if Check_MK is what you need
- Look for features you didn't know about
- and others....



Approach of the manual

- Is split into **task** oriented **articles**
- Does not try to replace the online help
- Always first a getting started, then more and more technical details
- Covers several Check_MK versions at once
- It's a continuous work in progress project



Current Situation

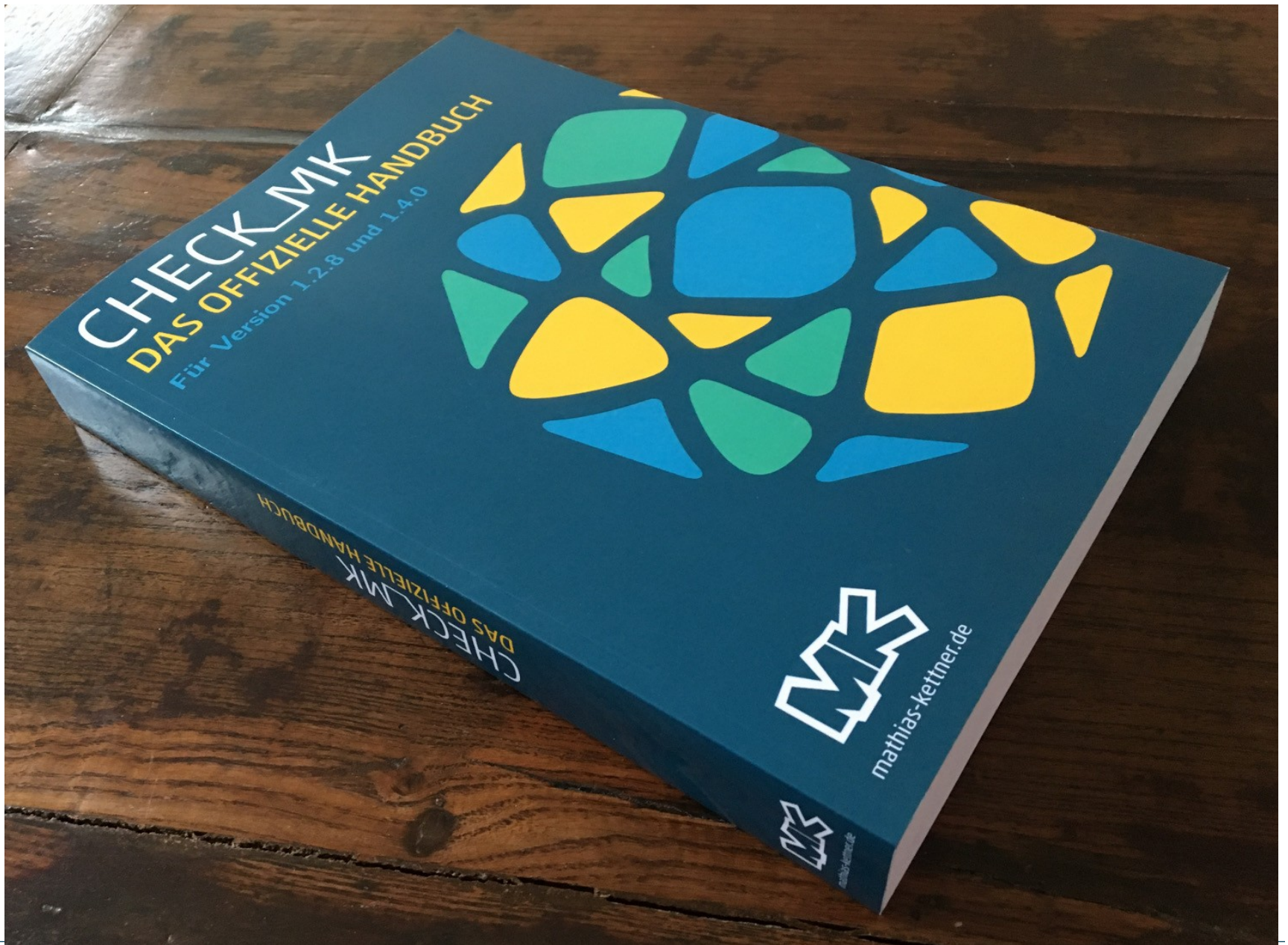


- German: 50 articles
- Many but not all topics covered
- English: 35 articles
- Translation is in progress

Print version

- First pre-edition (12 units): 530 pages
- Second pre-edition (12 units): 580 pages
- First official edition probably:
 - 800+ pages
 - later 2017
 - price: 90 EURO or 2 support credits
- Several up-to-date editions each year





Check_MK Conference #3 - News from the User Manual



Online version:

<http://mathias-kettner.de/cms.html>



Mathias Kettner



English Visitors
please click here.



Check_MK



Schulungen



Über uns

Check_MK - Das offizielle Handbuch

Letzte Aktualisierung: 26. Januar 2017

1. Installation

- [Check_MK - Das Offizielle Handbuch](#)
- [Installation auf einem Linux-Server](#)
- [Installation der virtuellen Appliance](#)
- [Ausführliche Installationsanleitung](#)
- [Schnelleinstieg ins Monitoring](#)
- [Check_MK Versionen](#)
- [Versionsupdate von Check_MK](#)

Ein Wegweiser für das Kennenlernen von Check_MK

Kurze Anleitung ohne viel Details

Kurze Anleitung ohne viel Details

Ausführliche Anleitung für Installation mit DEB/RPM

In drei Minuten zum ersten überwachten Host



Welche Check_MK-Version soll ich verwenden?



Update von Check_MK und Upgrade der Demoversion

Navigation:

[Check_MK](#)
[Die Check_MK Editionen](#)
[Das Check_MK Monitoring-System](#)

[Bildschirmfotos](#)
[Screencasts](#)
[Demo-Server](#)
[Erfolgsgeschichten und Meinungen](#)

[Download](#)
[Anwender-Handbuch](#)
[FAQ - Check_MK](#)
[Mailinglisten](#)
[Änderungshistorie \(Werks\)](#)
[Katalog der Checkplugins](#)



CHECK_MK
CONFERENCE #3



Thanks for listening!

YOUR FEEDBACK IS WELCOME