



Check_MK nluug

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Agenda

- Who am I
- Why Monitoring can be a pain in the *ss
- How to improve
- What is Check_MK and OMD
- Different versions
- Architecture
- Differences & Benefits
- Demo
- Questions



Tim Despiegelaere

- System Engineer @ **Synergics**
- **Lead monitoring**
- Since 2009

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Road to Check_MK



Why Monitoring can be a pain in the *ss

What to monitor? Is everything still working?



Why Monitoring can be a pain in the *ss

The C drive is not full and CPU is below 90.



Why Monitoring can be a pain in the *ss

Relax, the server will tell us if it's on fire.



Why Monitoring can be a pain in the *ss

Everything is on fire



What is Check_MK and OMD

OMD = Open Monitoring Distribution

<http://omdistro.org/>



What is Check_MK and OMD

Check_MK

<http://mathias-kettner.com/>



Different versions



raw

Free version

Multisite

Nagios core

enterprise

Pay version

Multisite

CMC core

Reporting

Better SNMP

Graphite Integration

...

appliance

Same as enterprise

OS admin: web-GUI

Integrated HA

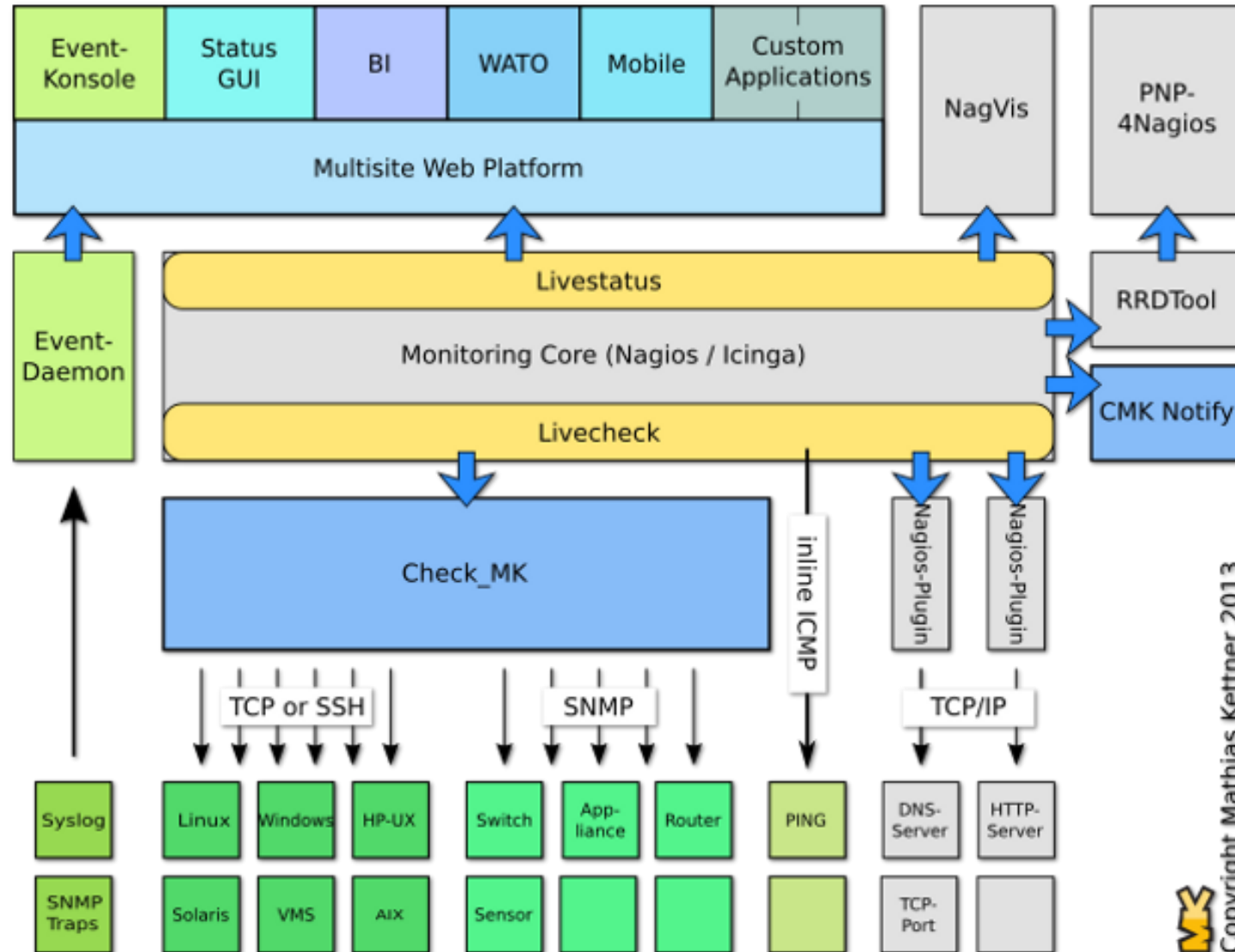
What is Check_MK and OMD

The Best Monitoring Tool.

Why? I'll convince you.

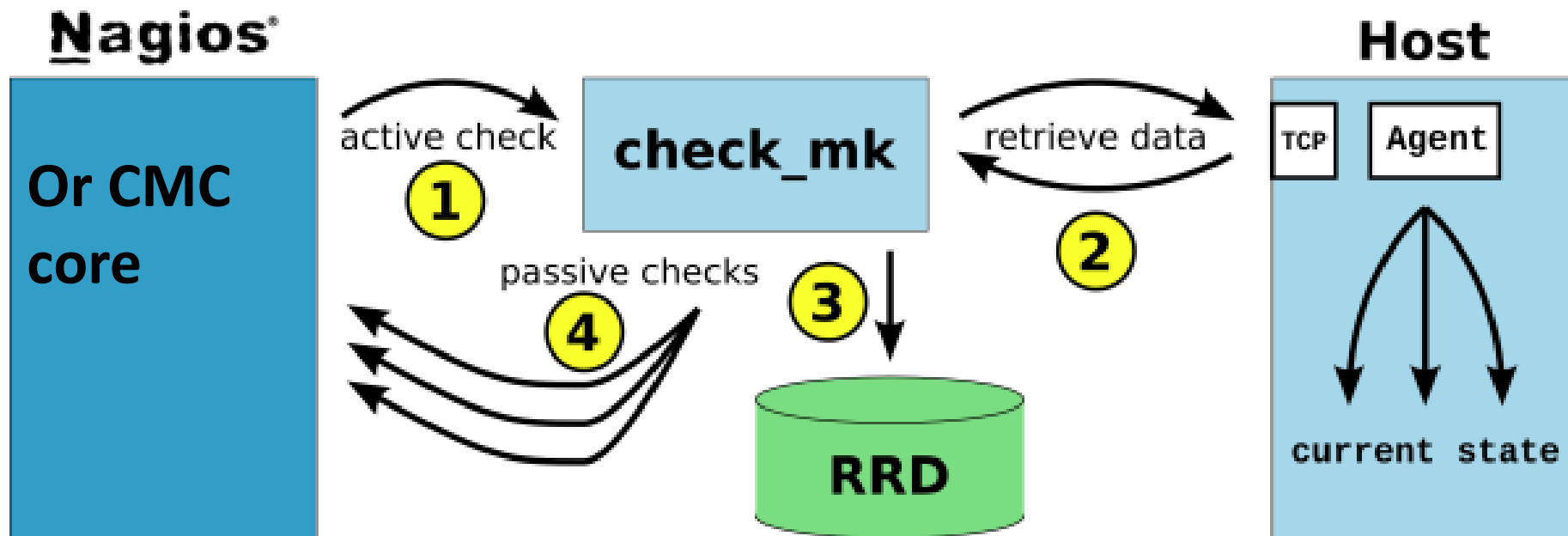


Architecture



Differences & Benefits

Polling mechanism



Small but very effective agent

- Windows, Linux, Solaris, ...
- No need to install any framework, works on all versions



Service inventory

- Out of the box: Cpu, memory, all disks, all network cards, uptime, services, processes, ...
- Out of the box: hardware checks! HP, Cisco, IBM, Juniper, APC, Dell, Netapp, EMC, ...



API

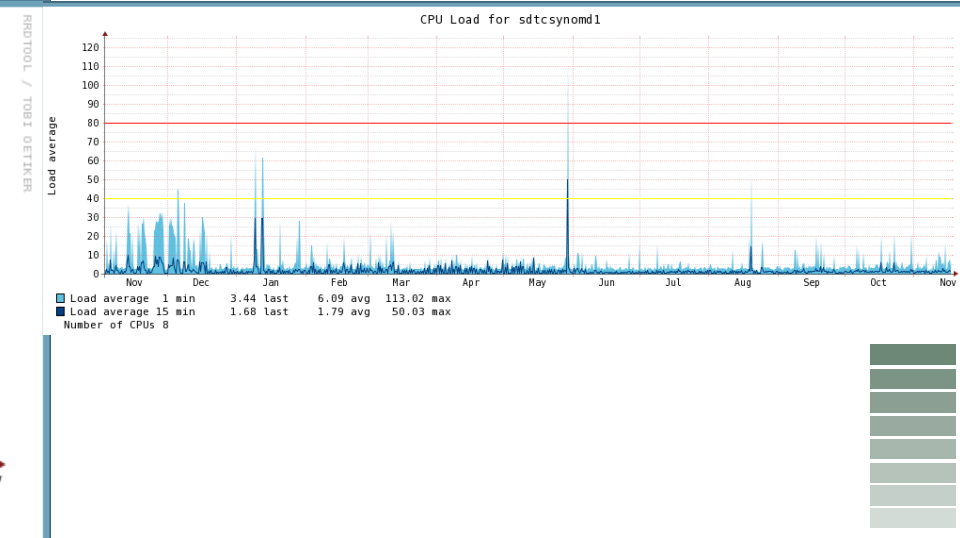
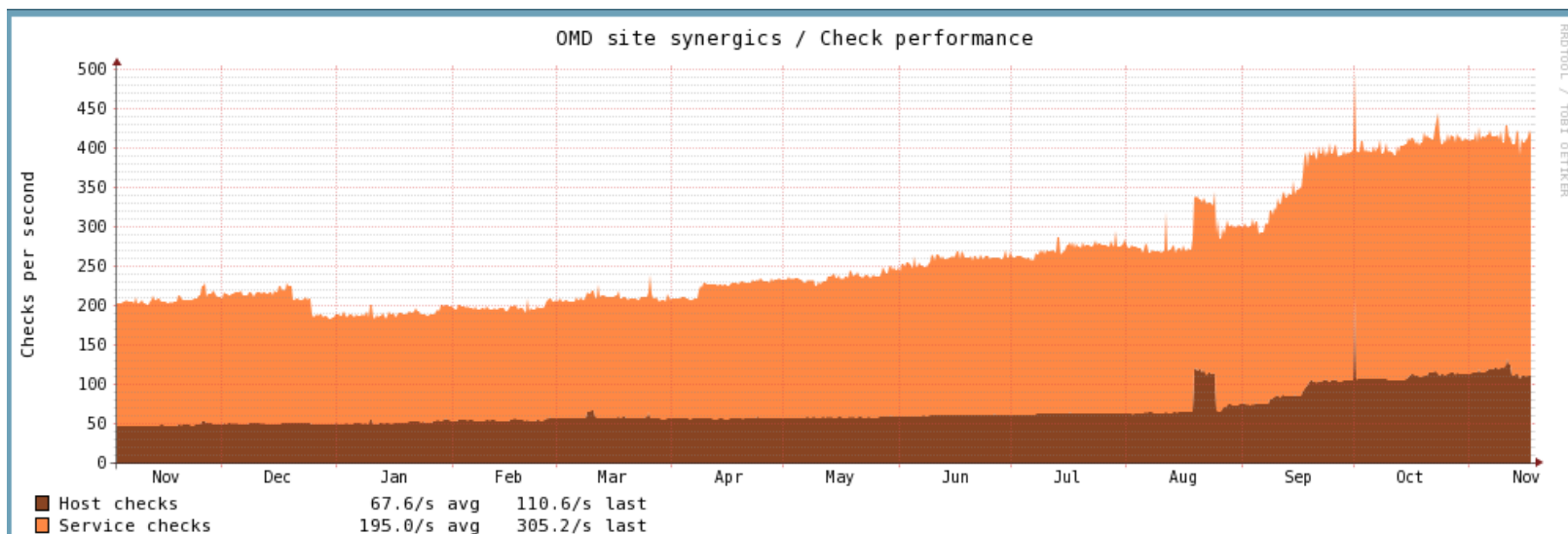
- Use the API to automate things
- Web requests and commandline



Differences & Benefits

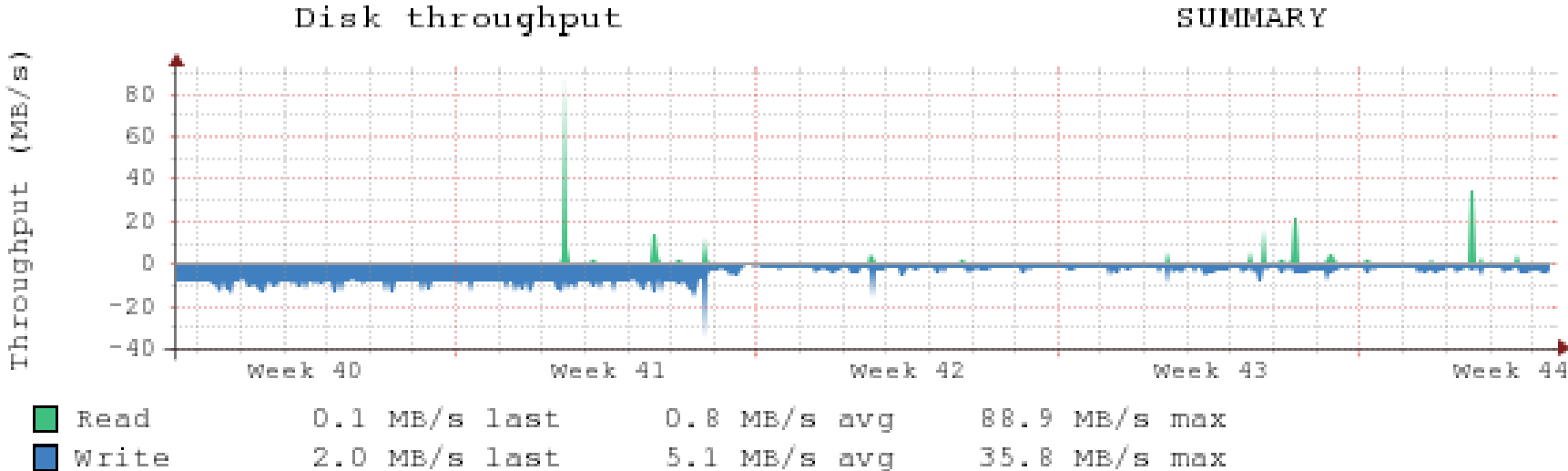
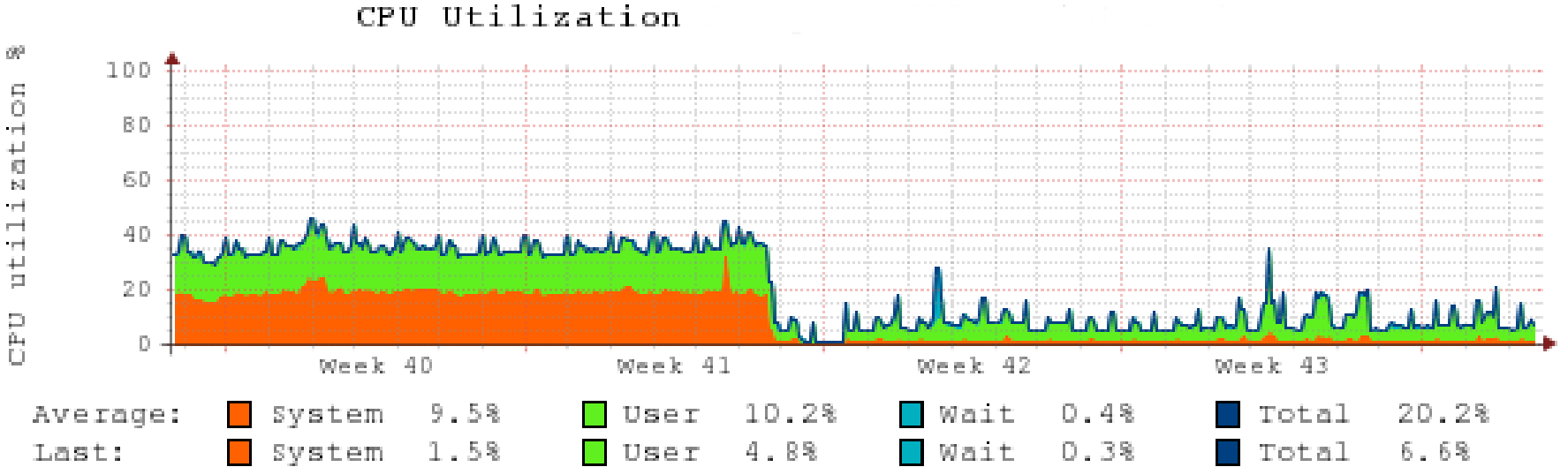
CMC core

- Much more performant
- Web requests and commandline



Differences & Benefits

CMC core



Differences & Benefits

Smart Vmware ESX checks

- Uses vcenter or ESX hosts
- Merges monitoring data

OK	ESX CPU		ESX CPU	OK - demand is 1.495 Ghz, 2 virtual CPUs
OK	ESX Datastores		ESX Datastores	OK - Stored on STOR_DIA_WINDOWS01 (1.70 TB/35.3
OK	ESX Guest Tools		ESX Guest Tools	OK - VMware Tools is installed, and the version is curre
OK	ESX Heartbeat		ESX Heartbeat	OK - Heartbeat status is green
OK	ESX Hostsystem		ESX Hostsystem	OK - Running on sdtcsynvs5esx10.localwan.net
OK	ESX Memory		ESX Memory	OK - Host: 3.72 GB, Guest: 655.00 MB, Ballooned: 0.00
OK	ESX Name		ESX Name	OK - SDIASYNADC1
OK	ESX Snapshots		ESX Snapshots	OK - No snapshots found



Multisite

- All configuration in Web GUI
- Rule based with tag system
- Configure all distributed systems in 1 interface
- Nagvis and Mediawiki integrated



Differences & Benefits

Business Aggregation

- Create an application with different hosts or services.

The screenshot displays a monitoring interface with a table of application components. The table has columns for 'Links', 'State', and 'Tree'. The 'State' column is highlighted in green and contains 'OK' for all items. The 'Tree' column shows a hierarchical view of the application components and their status.

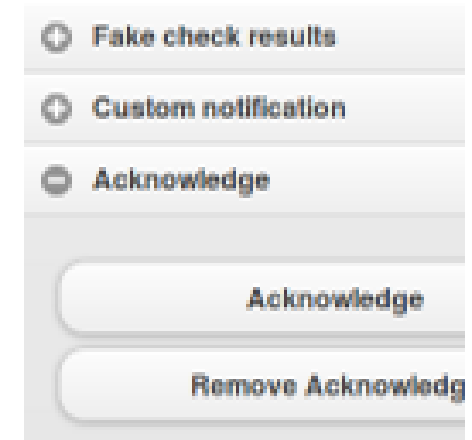
Links	State	Tree
	OK	OK ▼ [Redacted]
	OK	OK ▼ F5_Loadbalancers
	OK	OK [gear] ndialbrn03n2019 ♦ Host status ♦ Packet received via smart PING
	OK	OK [gear] nzwnlbr-01t2019 ♦ Host status ♦ Packet received via smart PING
	OK	OK [gear] nzwnlbr-01t2019 ♦ Host status ♦ Packet received via smart PING
	OK	OK ▼ Web_Farm_Att [Redacted]
	OK	OK [gear] sdtcattweb11 ♦ HTTP ye [Redacted] rvice ♦ HTTP OK: HTTP/1.1 200 OK - time
	OK	OK [gear] sdtcattweb12 ♦ HTTP [Redacted] rvice ♦ HTTP OK: HTTP/1.1 200 OK - time
	OK	OK ▼ [Redacted]
	OK	OK [gear] [Redacted] ♦ Host status ♦ [Redacted]: database is 2299 hours and 48 minutes up
	OK	OK [gear] [Redacted] ♦ Host status ♦ [Redacted]: database is 2299 hours and 48 minutes up



Differences & Benefits

And more...

- Mobile website
- Flexible notifications
- Community driven product
- Scheduled reporting
- Custom dashboards
- ...



Dynamic disk thresholds

- Large disks get higher thresholds

magic	5 GB	10 GB	20 GB	50 GB	100 GB	300 GB	800 GB
1.0	80%	80%	80%	80%	80%	80%	80%
0.9	77%	79%	80%	82%	83%	85%	86%
0.8	74%	77%	80%	83%	86%	88%	90%
0.7	70%	75%	80%	85%	88%	91%	93%
0.6	65%	74%	80%	86%	89%	93%	95%
0.5	60%	72%	80%	87%	91%	95%	97%



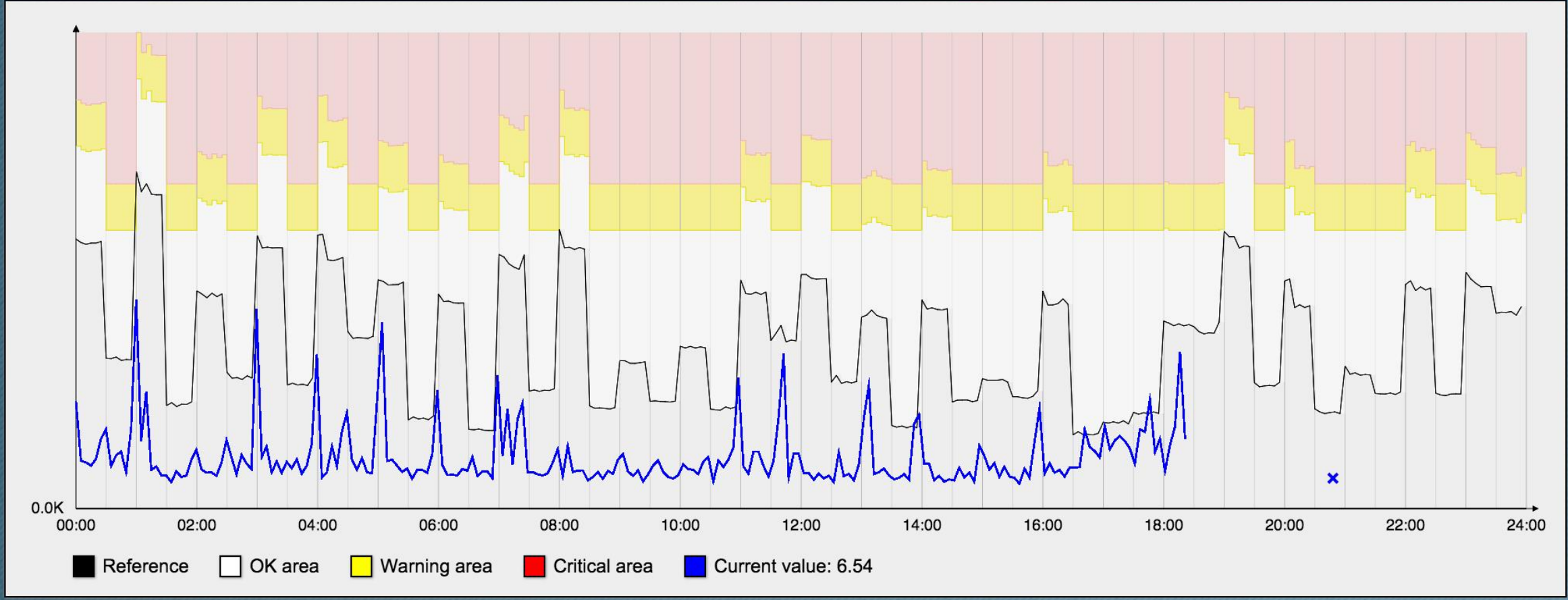
Predictive checks

- Disk usage – Disk full in xx days or weeks
- CPU trending, last 90 days
- Memory trending, last 90 days



Differences & Benefits

Show prediction for Wednesday



Let's get a closer look!



Questions?

