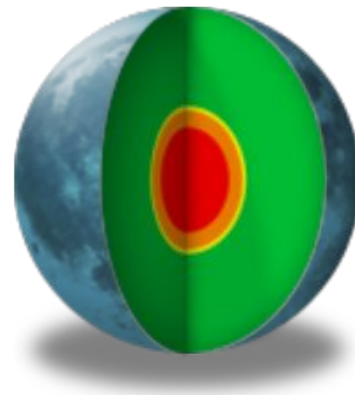# Move *to* Check_MK

Experiences from various customers (small to large to fortune 500) who have moved from Solarwinds, BMC Patrol, Nagios to Check_MK

GG Nagarkar & Ravi Bhure
Opex Software
www.opexsoftware.com

Who are we?

Opex

18+ years exp,

Monitoring, Infrastructure and Big Data domain

IT mgmt Product Development background

CTO & Founder, Opex Software

11+ years exp,

Product and infrastructure automation

Provides scalable and innovative solutions for DevOps

What we do @ OpexSoftware

Single metric : Speed with correctness

Mission : Automate Everything. Create Time

Experiences

Reasons of change to Check_MK

Simplification

Devops

Scaling

CMDB driven monitoring

Cost savings

OOB Integration with Enterprise solutions like PagerDuty, JIRA, SNS, IRC, etc
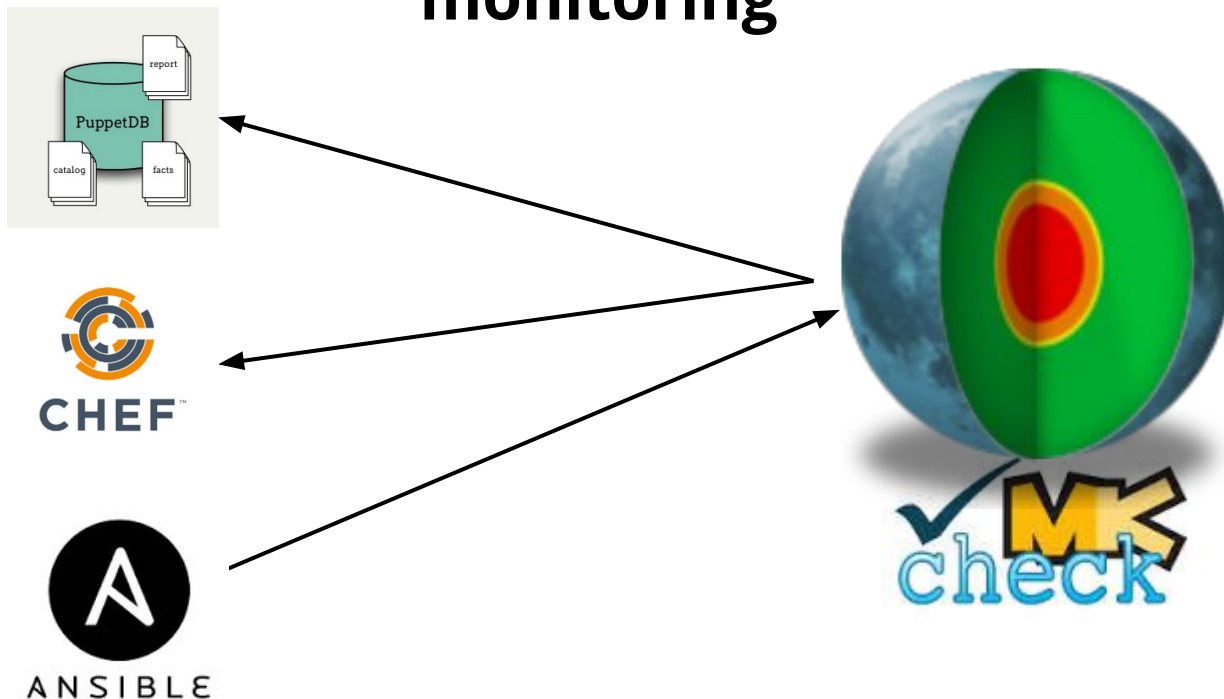
SOME KEY PROBLEMS & SOLUTIONs

Problem without CMDB driven monitoring or visa versa

Manual, slow mechanism of adding and removing a node in Monitoring with right checks

Human dependent and time consuming in a dynamic environment

Monitoring driven operations management

Automated Inventory Management for/from monitoring

GraphSky

Graphsky is a dashboard for Graphite

NO graphite/carbon agent

Read Check_MK rrd files for perf data

let's see how

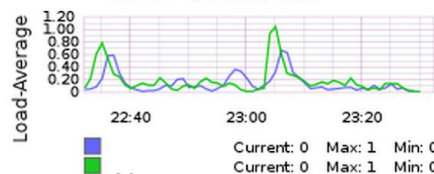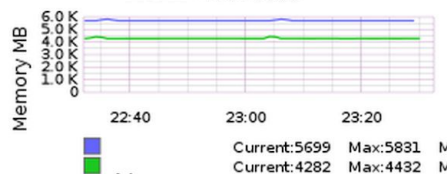> prod > All clusters > All hosts > All reports

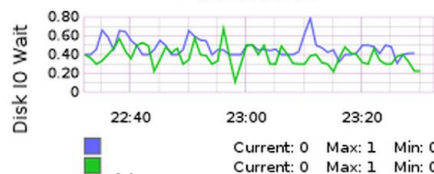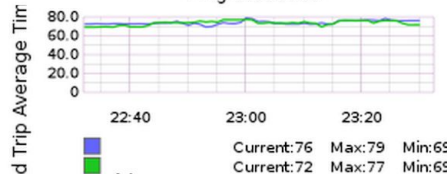from -1 hour until -30 seconds Go

Clusters

1 Minute load

Load-Average
1.20
1.00
0.80
0.60
0.40
0.20

22:40   23:00   23:20

Current: 0   Max: 1   Min: 0
Current: 0   Max: 1   Min: 0

- RAM Used

Memory MB
6.0 K
5.0 K
4.0 K
3.0 K
2.0 K
1.0 K
0

22:40   23:00   23:20

Current:5699   Max:5831   M
Current:4282   Max:4432   M

Used Space on /

GB
120.0 K
100.0 K
80.0 K
60.0 K
40.0 K
20.0 K
0

22:40   23:00   23:20

Current:101169   Max:10117
Current:109903   Max:10990

- Disks IO Wait

Disk IO Wait
0.80
0.60
0.40
0.20
0

22:40   23:00   23:20

Current: 0   Max: 1   Min: 0
Current: 0   Max: 1   Min: 0

Ping Statistics

nd Trip Average Time in
80.0
60.0
40.0
20.0
0

22:40   23:00   23:20

Current:76   Max:79   Min:69
Current:72   Max:77   Min:69

1 Minute load

Average
0.17
0.15
0.12
0.10
0.075

- RAM Used

ory MB
250.0
200.0
150.0
100.0

Used Space on /

GB
87.5 K
75.0 K
62.5 K
50.0 K
37.5 K

Clone the GraphSky repo

Graphite local settings

```
## Data directories
# NOTE: If any directory is unreadable in DATA_DIRS it will break metric browsing
#WHISPER_DIR = '/var/lib/graphite/whisper'
RRD_DIR = '/omd/sites/opex/opex_data'
#DATA_DIRS = [WHISPER_DIR, RRD_DIR] # Default: set from the above variables
LOG_DIR = '/var/log/graphite'
INDEX_FILE = '/var/lib/graphite/search_index'  # Search index file
```

Point to the right RRD local storage

```
# If using RRD files and rrdcached, set to the address or socket of the daemon
FLUSHRRDCACHED = 'unix:/omd/sites/opex/tmp/run/rrdcached.sock'
```

Set the RRD socket path
Simply restart the Graphite service

Does it work now?
Not Yet

```
 8   # As long as you retain this notice you can do whatever you want with this stuff.
 9   # If we meet some day, and you think this stuff is worth it, you can buy me a beer in return.
10   # ============================================================================
11
12   SRCDIR=/omd/sites/opex/var/pnp4nagios/perfdata
13   DSTDIR=/omd/sites/opex/opex_data
14   HOSTLIST="/omd/sites/opex/etc/check_mk/conf.d/opex/all_puppet_hosts.mk"
15   MKDIR="mkdir -p"
16
17   cd $DSTDIR ;
18   while read line
19   do
20    line=$(echo $line | sed '/^$/d' | grep -vE '\#|\(|\:|\*|\[|\]|\=|\}|\{')
21    if [ -n "$line" ];then
22    dc=$(echo $line  | tr '|' ' '  | awk '{print $2}')
23    env=$(echo $line  | tr '|' ' '  | awk '{print $3}')
24    boxtype=$(echo $line | tr '|' ' ' | awk '{print $4}')
25    host=$(echo $line | tr '|' ' '  | awk '{print $1}' | tr "" ' ' | xargs)
26   # echo ${dc,,} ${env,,} ${boxtype,,} ${host,,}
27    if [ ! -d $DSTDIR/${dc,,} ] ; then
28      $MKDIR $DSTDIR/${dc,,}
29    fi
30    if [ ! -d $DSTDIR/${dc,,}/${env,,} ] ; then
31      $MKDIR $DSTDIR/${dc,,}/${env,,}
32    fi
33    if [ ! -d $DSTDIR/${dc,,}/${env,,}/${boxtype,,} ] ; then
34      $MKDIR $DSTDIR/${dc,,}/${env,,}/${boxtype,,}
35    fi
36    cd $DSTDIR/${dc,,}/${env,,}/${boxtype,,}/ ;
37    ln -sf $SRCDIR/${host,,} .
38    fi
39   done < $HOSTLIST
40
41   # setup ownershop to web user, so it read the files from graphsky
42   chown -R opex:opex $DSTDIR
43
```

Comparision between Check_MK and Other Monitoring tools

Comparison : Few imp features
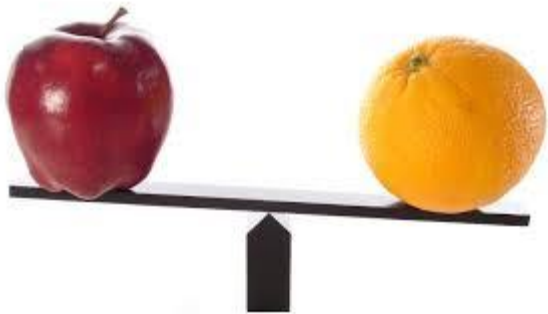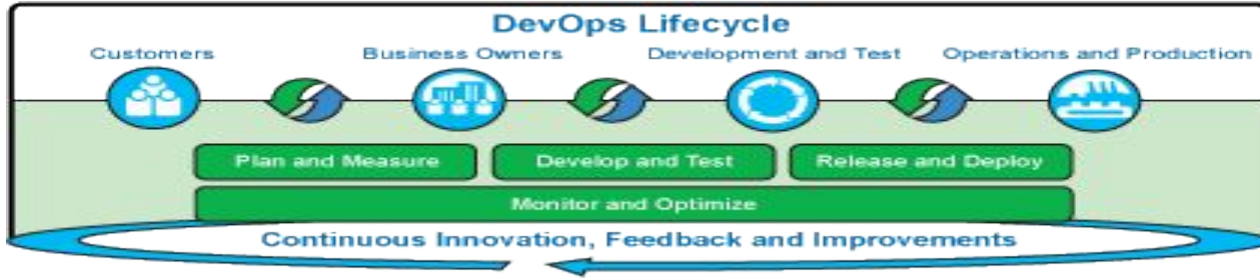
Virtualization focus

APM via logs (ELK)

Root causal

- Change Information
- Transactional info

IP Address Management

DevOps journey started...

TestNow to get high speed

In pre-prod testing, need the detail transaction (web-app-db-system) level monitoring ALONG with log analytics

Contact Info

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Opex Software : we measure single metric
"Speed *with correctness*"

Mission : Automate Everything. Create Time

Opex CEO at HashiConf 2015, Portland, OR