

CheckMK Mongo DB Plugin

Beschreibung:

Um die MongoDB Plugins zu nutzen müssen A das Plugin Aktiviert werden und B der Agent neu gebacken werden.

Mit den MongoPlugins lassen sich Verbindungen Größe etc. Monitoren.

in unserem Beispiel wird der Server schon mit dem Standard agent überwacht und ist in Checkmk schon eingebunden. Der Server hört auf den Namen mongodb

Einrichtung MongoDB, wenn nicht schon geschehen:

Anleitung zum installieren, [hier](#) klicken

DB und Tabelle erstellen wenn nicht vorhanden:

Wenn wir keine Datenbank und Tabelle haben zum überwachen dann erstellen wir eine Dummy DB mit Einträgen um diese wachsen zu lassen.

in [diesem](#) Kaptiel der Mongo db, Können wir eine Testdatenbank mit einer Tabelle und eintragen erstellen lassen.

Wenn das Fill script ausgeführt wird, kann man die Tabelle wachsen lassen.

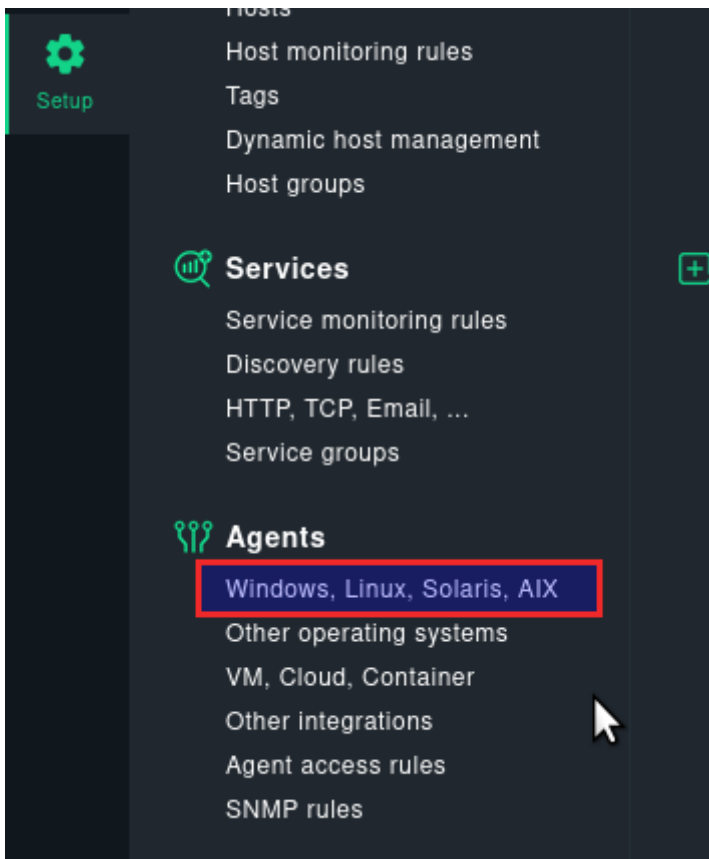
Mit dem löschen und db_free script den speicher wieder freigeben.

Nun kann man damit die Datenbankgröße zum testen ändern, damit das Monitoring auch Werte zum testen hat.

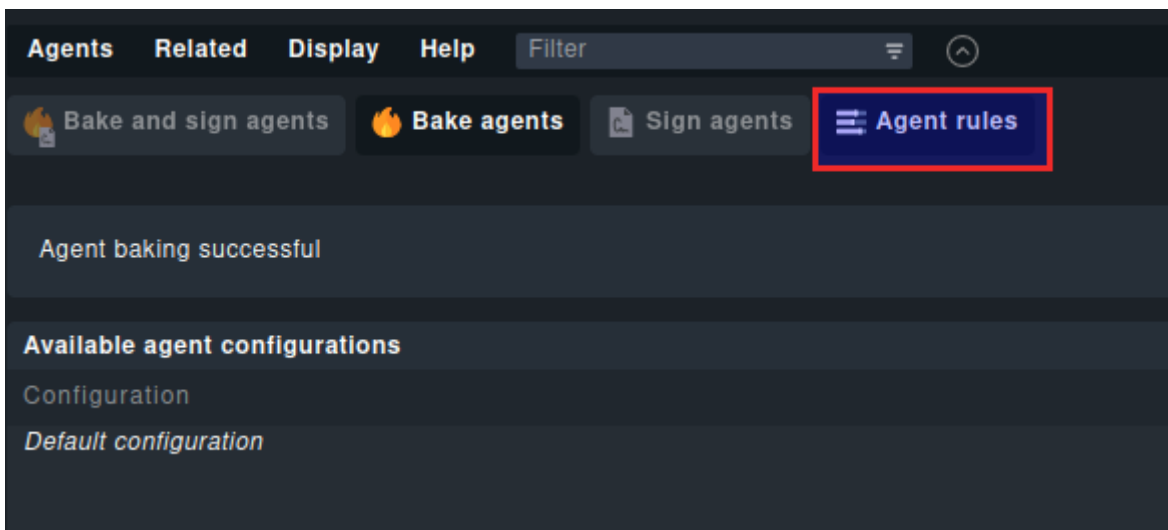
Einrichtung CheckMK:

Plugin aktivieren

Dazu in checkmk auf Setup -> Agents -> Windows , linux, Solaris -> AIX gehen



Dort dann auf Agent Rules klicken

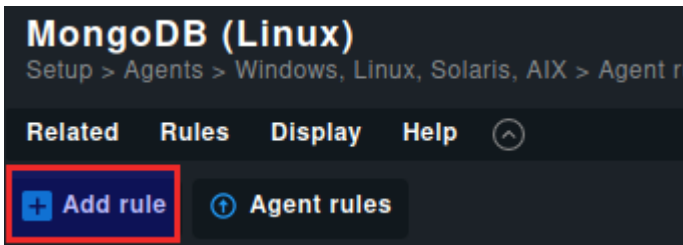


Nun aus den Agent rules mongoddb Linux auswählen / anklicken

Agent rules > Agent Plugins

APT normal and security updates (Linux)	0	Active Directory Replication (Windows)	0	Apache webservers (Linux)	0	Arcserve (German) backups (Windows)	0
Broadcom bonding network interface on Window	0	CUPS Printer Queues	0	Checkmk site objects	0	Citrix Licenses (Windows)	0
Citrix XenApp (Windows)	0	Count, size and age of files	0	Count, size and age of files - mk_filestat (Linux/	0	DB2 Databases (Linux, AIX)	0
DHCP pools (Windows)	0	Database Availability Group (DAG) (Windows) ..	0	Docker node and containers	0	EMC ScaleIO	0
Established TCP/UDP connections	0	Finetune Windows Eventlog monitoring	0	Hardware/Software-Inventory (Linux, Windows, S	0	Hyper-V VM Guest Information (Windows)	0
Hyper-V VMs (Windows)	0	IBM MQ (Linux)	0	IBM WebSphere MQ (Linux) - Deprecated	0	ISC DHCP-Daemon (Linux)	0
Iptables filter configuration	0	JMX monitoring of Java JVMs using Jolokia	0	Kaspersky Anti-Virus (Linux)	0	LSI Raid Controller Status (via StorCLI)	0
LVM, Logical Volume Groups (Linux)	0	Local DNS resolving (Linux, Unix)	0	MS Exchange Database Latency (Windows)	0	MS IIS Application Pool State (Windows)	0
MS Office 365 (Windows)	0	MTR (Matt's traceroute) (Linux)	0	Mailman mailing lists queues (Linux)	0	MegaRAID monitoring (Windows)	0
Memory usage of DB2 (Linux, AIX, Solaris)	0	Microsoft SQL Server (Windows)	0	MongoDB (Linux)	0	Monitor file operations with Inotify (Linux)	0
MySQL Databases	0	NFS IO Stats (Linux)	0	NFS4 exports (Linux, Solaris)	0	NGINX webservers (Linux)	0
Network interfaces on Windows	0	Number of logged in users (Linux)	0	ORACLE databases (Linux, Solaris, AIX, Windov	0	Plesk backups and domains (Linux)	0
PostgreSQL database and sessions (Linux, Winc	0	Redis databases	0	Remote Desktop Licenses (Windows)	0	SAP HANA	0
SAP R/3 Monitoring plugin	0	SAP router certificate	0	SMART harddisk monitoring (Linux)	0	SSH daemon configuration (Linux)	0
SUSEConnect (Linux)	0	Signatures of certificates in JAR files	0	Symantec Anti Virus (Linux)	0	System Information for Inventory via dmidecode	0
TSM - IBM Tivoli Storage Manager (Linux, Unix)	0	Text logfiles (Linux, Solaris, Windows)	0	Unitrends backup and replication plugins (Linux)	0	User quotas on filesystems (Linux)	0
Veeam Backup Status (Windows)	0	Veritas Volume Manger (Linux, HP-UX)	0	Windows License	0	Windows Multipath	0
Windows Performance-Counter objects	0	Windows Task Scheduler	0	Windows Updates	0	Zorp firewall	0
Zypper normal and security updates (Linux)	0						

Nun eine Rule erstellen durch anklicken von add rule



Nun folgende Einstellungen ausfüllen, die Host oder Gruppenauswahl an eure Bedürfnisse anpassen.

Dann auf Save klicken.

New rule: MongoDB (Linux)

Setup > Agents > Windows, Linux, Solaris, AIX > Agent rules > MongoDB (Linux) > New rule: MongoDB (Linux)

Rule Related Display Help

Save **Abort** MongoDB (Linux)

This will deploy the agent plugin mk_mongodb.py.

Rule Properties

Description MongoDBServers

Comment

Documentation URL

Rule activation do not apply this rule

MongoDB (Linux)

Deploy mk_mongodb.py without authentic...
Deploy without authentication.

Conditions

Condition type Explicit conditions


Folder Main

Host tags **Add tag condition**

Host labels **Add label condition**

Explicit hosts
* mongodb * (Select hostname)
Negate: make rule apply for all but the above hosts

Nun die Changes übernehmen.

1 change 

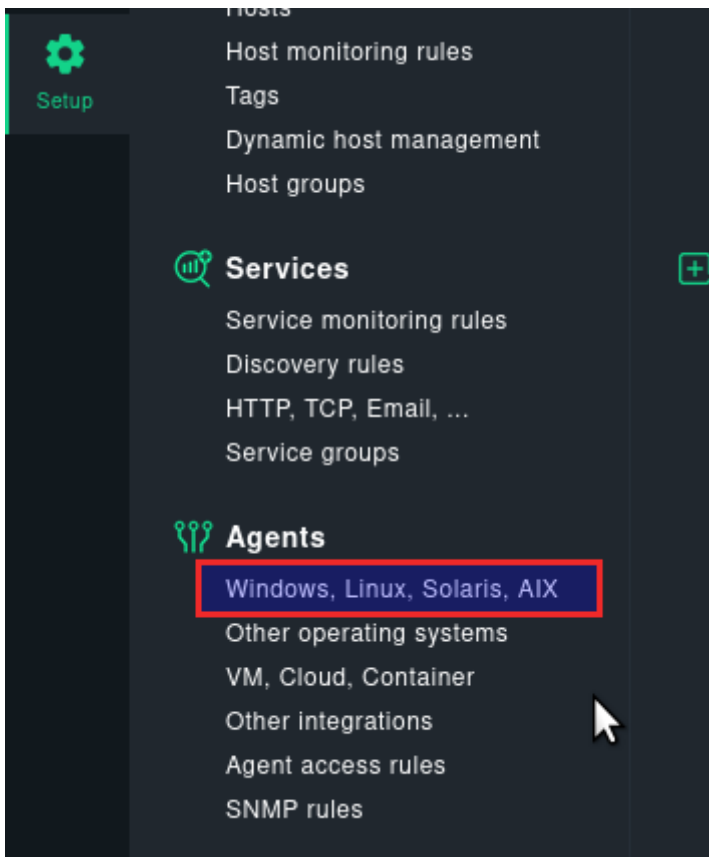
Activate pending changes

Setup > Activate pending changes

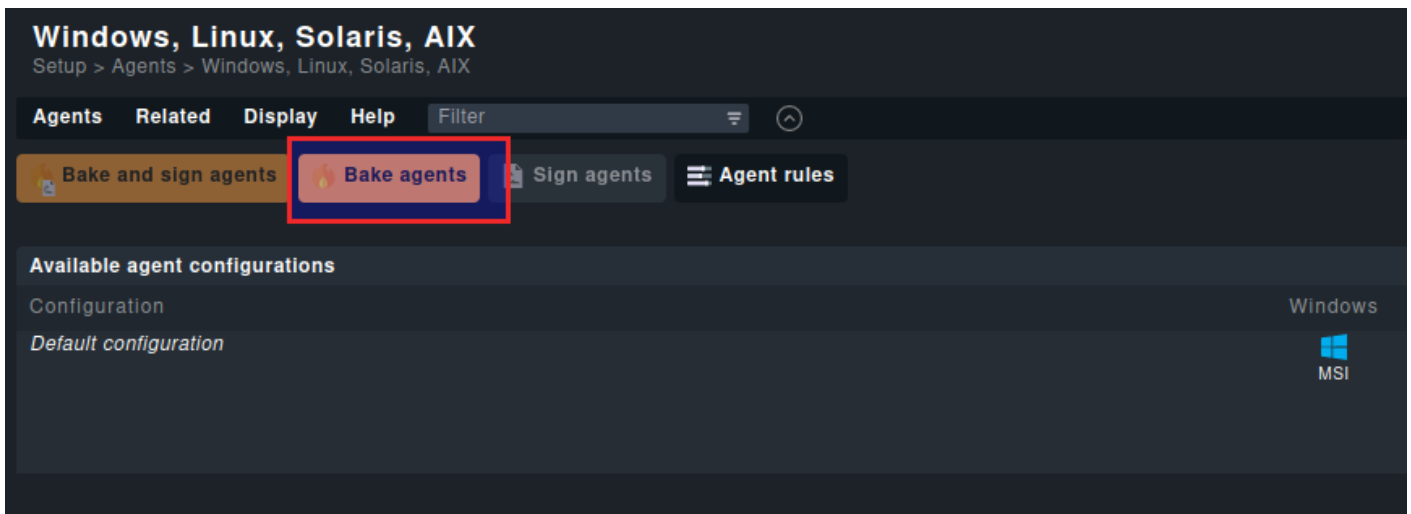
Changes Related Display Help

Activate on selected sites

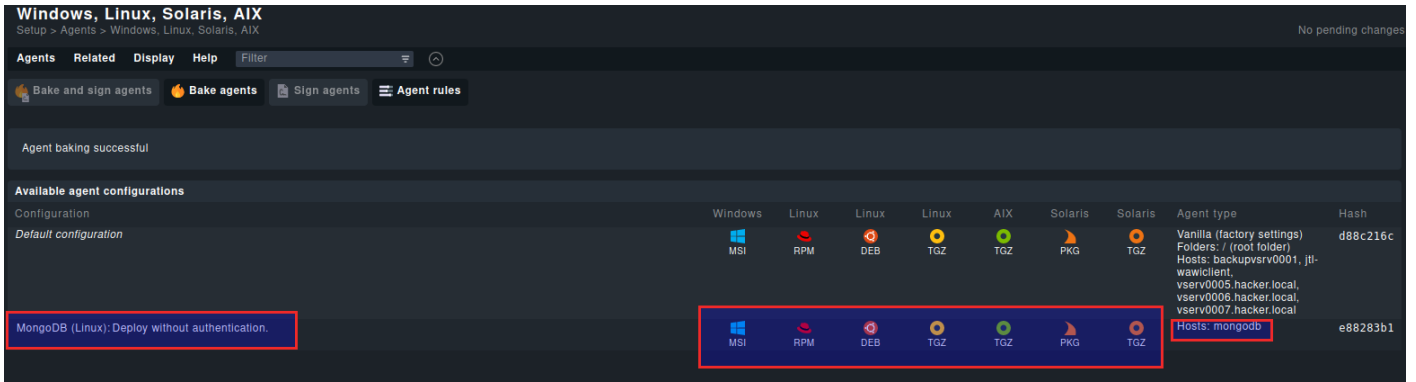
Nun wieder auf Setup -> Agents -> Windows , linux, Solaris -> AIX gehen



Dort dann auf bake Agents klicken



Jetzt einen Moment warten, dann erscheint eine neue Agent Kategorie. Vorne der Typ Linux mongoddb in der Mitte dann wieder den Agent downloaden für das System vom Server. Und zum Schluss in der letzten Spalte steht auch für welche Server dieser Agent zutrifft, in unserem Fall mongoddb.



Jetzt wieder wie gewohnt mit scp oder anderen mittels diesen Agent installieren.

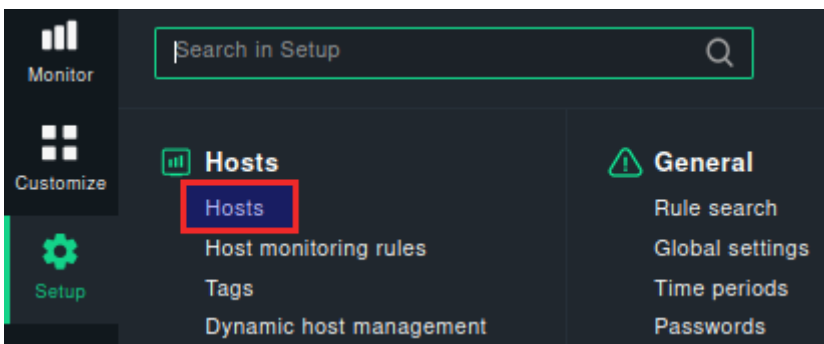
Nachdem der Agent installiert ist, testen wir ob der Mongo Teil erkannt wurde. Dazu geben wir einfach check_mk_agent ein im terminal auf dem mongodbserver ein.

```
check_mk_agent
```

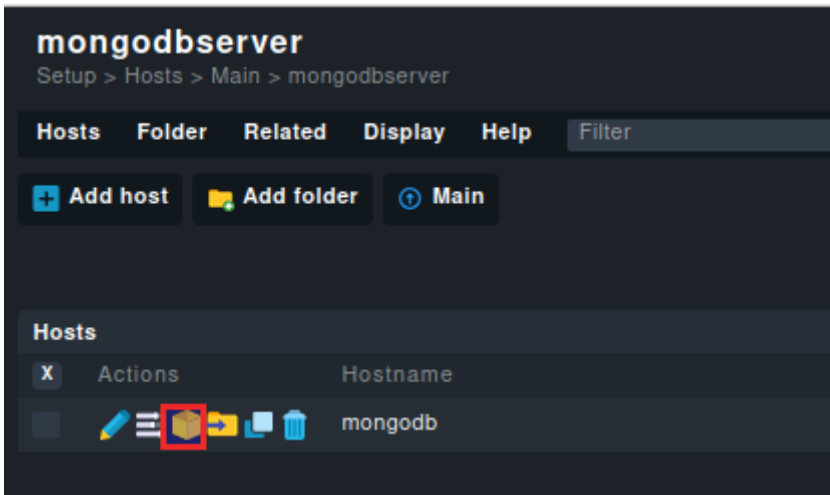
Ausgabe, dort sieht man unsere Testdatenbank mit der Testtabelle

```
ats :{ testtabelle :{ ns : meineTestDatenbank.testtabelle , size :0, count :0, storageSize :1228
"freeStorageSize":4096,"capped":false,"nindexes":1,"indexBuilds":[],"totalIndexSize":12288,"total
ze":24576,"indexSizes":{"_id ":12288},"scaleFactor":1,"ok":1.0,"indexStats":[{"name":"_id ","key
_id":1},"host":"mongodb:27017","accesses":{"ops":0,"since":{"$date":1710326708762}},"spec":{"v":
"key":{"_id":1},"name":"_id_"}]}]}]}
<<logwatch>>
[[MongoDB startupWarnings]]
{"t":{"$date":"2024-03-13T10:03:55.120+01:00"},"s":"I", "c":"STORAGE", "id":22297, "ctx":"in
andlisten","msg":"Using the XFS filesystem is strongly recommended with the WiredTiger storage en
ne. See http://dochub.mongodb.org/core/prodnotes-filesystem","tags":["startupWarnings"]}
{"t":{"$date":"2024-03-13T10:03:55.883+01:00"},"s":"W", "c":"CONTROL", "id":22120, "ctx":"in
andlisten","msg":"Access control is not enabled for the database. Read and write access to data a
configuration is unrestricted","tags":["startupWarnings"]}
{"t":{"$date":"2024-03-13T10:03:55.883+01:00"},"s":"W", "c":"CONTROL", "id":22178, "ctx":"in
andlisten","msg":"/sys/kernel/mm/transparent_hugepage/enabled is 'always'. We suggest setting it
'never',"tags":["startupWarnings"]}
root@mongodb:~# check_mk_agent | grep Test
::/user.slice/user-0.slice/session-1.scope root 6352 2316 00:00:00 00:00 7762 grep Test
"admin":{"collections":["system.version"],"collstats":{"system.version":{"ns":"admin.system.versi
","size":59,"count":1,"avgObjSize":59,"storageSize":32768,"freeStorageSize":12288,"capped":false
indexes":1,"indexBuilds":[],"totalIndexSize":32768,"totalSize":65536,"indexSizes":{"_id ":32768}
scaleFactor":1,"ok":1.0,"indexStats":[{"name":"_id_", "key":{"_id":1},"host":"mongodb:27017","acce
s":{"ops":0,"since":{"$date":1710320635902},"spec":{"v":2,"key":{"_id":1},"name":"_id_"}]}]}},
fig":{"collections":["system.sessions"],"collstats":{"system.sessions":{"ns":"config.system.sessi
s","size":99,"count":1,"avgObjSize":99,"storageSize":24576,"freeStorageSize":4096,"capped":false
indexes":2,"indexBuilds":[],"totalIndexSize":49152,"totalSize":73728,"indexSizes":{"_id ":24576,"
idTTLIndex":24576},"scaleFactor":1,"ok":1.0,"indexStats":[{"name":"_id_", "key":{"_id":1},"host":
mongodb:27017", "accesses":{"ops":236,"since":{"$date":1710320635940},"spec":{"v":2,"key":{"_id":1
name":"_id_"},"name":"lsidTTLIndex","key":{"lastUse":1},"host":"mongodb:27017", "accesses":{"ops
0,"since":{"$date":1710320635945},"spec":{"v":2,"key":{"lastUse":1},"name":"lsidTTLIndex","expir
afterSeconds":1800}]}]}]},"local":{"collections":["startup_log"],"collstats":{"startup_log":{"ns":
cal.startup_log", "size":2349,"count":1,"avgObjSize":2349,"storageSize":32768,"freeStorageSize":12
8,"capped":true,"max":0,"maxSize":10485760,"nindexes":1,"indexBuilds":[],"totalIndexSize":32768,
talSize":65536,"indexSizes":{"_id ":32768},"scaleFactor":1,"ok":1.0,"indexStats":[{"name":"_id_",
key":{"_id":1},"host":"mongodb:27017", "accesses":{"ops":0,"since":{"$date":1710320635919},"spec":
v":2,"key":{"_id":1},"name":"_id_"}]}]}}, "meineTestDatenbank":{"collections":["testTabelle"],"col
stats":{"testTabelle":{"ns":"meineTestDatenbank.testTabelle", "size":0, "count":0, "storageSize":1228
"freeStorageSize":4096,"capped":false,"nindexes":1,"indexBuilds":[],"totalIndexSize":12288,"total
ze":24576,"indexSizes":{"_id ":12288},"scaleFactor":1,"ok":1.0,"indexStats":[{"name":"_id_", "key
_id":1},"host":"mongodb:27017", "accesses":{"ops":0,"since":{"$date":1710326708762},"spec":{"v":
"key":{"_id":1},"name":"_id_"}]}]}]}
root@mongodb:~#
```

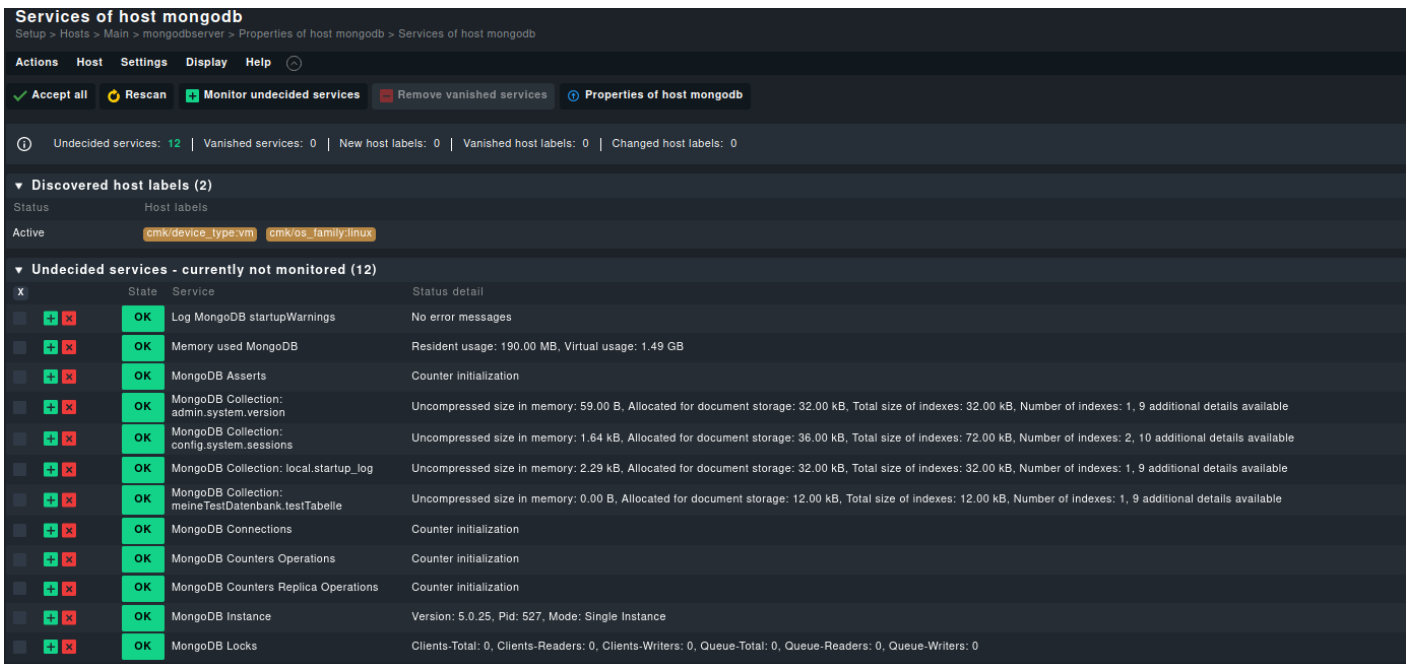
Somit ist sichergestellt der Agent funktioniert.
Jetzt können wir unseren Host konfigurieren
Dazu gehen wir auf Setup -> Host



Dann klicken wir in der Gruppe wo die Hosts aufgelistet werden auf die gelbe Kiste



und tadaaa, unsere MongoDB steht drin.



Jetzt nur noch die Services die wir haben wollen hinzufügen
Die Änderungen wieder übernehmen.

und in der Hostview ist die MongoDB drin:

Services of Host mongodb		
Monitor > Overview > All hosts > mongodb > Services of Host		
Commands Host Services Add to Export Display Help		
⚠ Acknowledge problems 🔴 Schedule downtimes 🟢 Filter 📄 Show checkboxes 🔍 mongodb		
OK	Check_MK	[agent] Success, execution time 1.5 sec
OK	Check_MK Agent	Version: 2.1.0p16, OS: linux, Agent plugins: 2, Local checks: 0
OK	Check_MK Discovery	no unmonitored services found, no vanished services found, no new host labels
OK	CPU load	15 min load: 0.00, 15 min load per core: 0.00 (4 cores)
OK	CPU utilization	Total CPU: 4.59%
OK	Disk IO SUMMARY	Read: 0.00 B/s, Write: 77.1 kB/s, Latency: 281 microseconds
OK	Filesystem /	21.48% used (4.68 of 21.80 GB), trend: +3.28 MB / 24 hours
OK	Interface 2	[enp6s10], (up), MAC: BC:24:11:DE:A7:98, Speed: unknown, In: 926 B/s, Out: 2.47 kB/s
OK	Kernel Performance	Process Creations: 20.17/s, Context Switches: 545.50/s, Major Page Faults: 0.00/s, Page Swap in: 0.00/s, Page Swap Out: 0.00/s
OK	Log MongoDB startupWarnings	No error messages
OK	Memory	Total virtual memory: 1.95% - 269.03 MB of 13.51 GB, 9 additional details available
OK	Memory used MongoDB	Resident usage: 189.00 MB, Virtual usage: 1.49 GB
OK	MongoDB Asserts	0.00 Regular Asserts/sec, 0.00 Warning Asserts/sec, 0.00 Msg Asserts/sec, 2.48 User Asserts/sec, 0.00 Tripwire Asserts/sec, 0.00 Rollovers Asserts/sec
OK	MongoDB Collection: admin.system.version	Uncompressed size in memory: 59.00 B, Allocated for document storage: 32.00 kB, Total size of indexes: 32.00 kB, Number of indexes: 1, 9 additional details available
OK	MongoDB Collection: config.system.sessions	Uncompressed size in memory: 2.13 kB, Allocated for document storage: 36.00 kB, Total size of indexes: 72.00 kB, Number of indexes: 2, 10 additional details available
OK	MongoDB Collection: local.startup_log	Uncompressed size in memory: 2.29 kB, Allocated for document storage: 32.00 kB, Total size of indexes: 32.00 kB, Number of indexes: 1, 9 additional details available
OK	MongoDB Collection: meineTestDatenbank.testTabelle	Uncompressed size in memory: 0.00 B, Allocated for document storage: 12.00 kB, Total size of indexes: 12.00 kB, Number of indexes: 1, 9 additional details available
OK	MongoDB Connections	Used connections: 3, Used percentage: 0.006%, Rate: 0.4968284764190005/sec
OK	MongoDB Counters Operations	Insert: 0.00/s, Query: 0.00/s, Update: 0.00/s, Delete: 0.00/s, Getmore: 0.00/s, Command: 4.80/s
OK	MongoDB Counters Replica Operations	Insert: 0.00/s, Query: 0.00/s, Update: 0.00/s, Delete: 0.00/s, Getmore: 0.00/s, Command: 0.00/s
OK	MongoDB Instance	Version: 5.0.25, Pid: 527, Mode: Single Instance
OK	MongoDB Locks	Clients-Total: 0, Clients-Readers: 0, Clients-Writers: 0, Queue-Total: 0, Queue-Readers: 0, Queue-Writers: 0
OK	Mount options of /	Mount options exactly as expected
OK	Number of threads	150, Usage: 0.48%

Der Gesamtspeicher einer Collection besteht aus Dokumentspeicher und Indexes

Allocated for document storage: 3.81 MB, Total size of indexes: 1.27 MB

3,81 MB + 1,27 MB = 5,08 MB

Siehe Cli Ausgabe:

```
test> show databases
admin          64.00 KiB
config         108.00 KiB
local          64.00 KiB
meineTestDatenbank 5.08 MiB
test>
```

Fertig

Version #6

Erstellt: 13 März 2024 07:42:51 von Admin

Zuletzt aktualisiert: 13 März 2024 12:26:38 von Admin