

# Systemmanagement mit RHQ – auch für Linux



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# Einführung



- Open Source seit Februar 2008
- Upstream für JBoss Operations Network (JBoss ON)
- <http://rhq-project.org/>
- Seit Sept 2009 inkl. Jopr



- ▼ pickeldi
  - Ant Bundle Handler
  - ▶ Apache HTTP Server
  - ▼ CPU
    - CPU 0
    - CPU 1
    - CPU 2
    - CPU 3
    - CPU 4
    - CPU 5
    - CPU 6
    - CPU 7
  - File System
  - ▼ JBossAS Server (JBossAS5 plugin)
    - localhost:1099
    - ▼ pickeldi:1099
      - Applications
      - Resources
      - Service Binding Manager
  - JBossAS Server (JBossAS plugin)
  - Network Adapter
  - ▼ Postgres Server
    - ▼ jonqa
      - ▼ Database
        - jonqa
        - postgres
    - User
  - ▶ RHQ Agent

## RHQ Agent

pickeldi > RHQ Agent



### Summary

**Type:** RHQ Agent (Server)      **Description:** RHQ Management Agent  
**Version:** 3.0.0.Beta1      **Parent:** Linux 'pickeldi'  
**SIGAR Version:** Version=1.6.5.132 (05/20/2010 04:04 AM); Native version=1.6.5.130 (05/20/2010 07:21 AM)      **Reason For Last Restart:** PROCESS\_START

- SUMMARY
- MONITOR
- INVENTORY
- ALERT
- CONFIGURATION
- OPERATIONS
- E

▶ OVERVIEW      TIMELINE

### Recent Measurements

- Agent-Server Clock Difference:** 1.000us
- Avg Execution Time Commands Received Successfully:** 2ms
- Avg Execution Time Commands Sent Successfully:** 2ms
- JVM Active Threads:** 41
- JVM Free Memory:** 18,5MB
- JVM Total Memory:** 71,6MB
- Number Of Active Commands Being Sent:** 0
- Number of Agent Restarts:** 1
- Number of Commands In Queue:** 0
- Number of Commands Received but Failed per Minute:** 0
- Number of Commands Received Successfully per Minute:** 0
- Number of Commands Sent but Failed per Minute:** 0
- Number of Commands Spooled To Disk:** 0

### Recent Configuration Updates

No configuration change history

### Recent Operations

No recent operation history

### Recent Event Counts

No events in the last 24 hours

### Recent Package History

No recent package history

Browse Resources

RESOURCES (545)    GROUPS (1)    GROUP DEFINITIONS (0)

▶ ALL    PLATFORMS (1)    SERVERS (11)    SERVICES (533)

Search:  ☆ ▼

<input type="checkbox"/>		Resource	Location	Description	Availability
<input type="checkbox"/>		Network Adapter tun0	Linux pickeldi	00:00:00:00:00:00	!
<input type="checkbox"/>		CPU CPU 0	Linux pickeldi	Intel Xeon	✓
<input type="checkbox"/>		CPU CPU 2	Linux pickeldi	Intel Xeon	✓
<input type="checkbox"/>		CPU CPU 7	Linux pickeldi	Intel Xeon	✓
<input type="checkbox"/>		CPU CPU 1	Linux pickeldi	Intel Xeon	✓
<input type="checkbox"/>		CPU CPU 6	Linux pickeldi	Intel Xeon	✓
<input type="checkbox"/>		CPU CPU 4	Linux pickeldi	Intel Xeon	✓
<input type="checkbox"/>		CPU CPU 5	Linux pickeldi	Intel Xeon	✓
<input type="checkbox"/>		CPU CPU 3	Linux pickeldi	Intel Xeon	✓
<input type="checkbox"/>		Network Adapter sit0	Linux pickeldi	00:00:00:00:0F:9B	!
<input type="checkbox"/>		Network Adapter lo	Linux pickeldi	00:00:00:00:00:00	✓
<input type="checkbox"/>		Network Adapter virbr0	Linux pickeldi	00:00:00:00:00:00	✓
<input type="checkbox"/>		Network Adapter eth0	Linux pickeldi	00:21:9B:3E:7E:23	✓
<input type="checkbox"/>		JBossAS Server (JBossAS plugin) pickeldi RHQ Server	Linux pickeldi	JBoss Application Server hosting the RHQ Server	✓
<input type="checkbox"/>		JBossAS Server (JBossAS5 plugin) pickeldi:1099	Linux pickeldi	JBoss Enterprise Application Platform	✓

UNINVENTORY SELECTED

Total: 545    Items Per Page:

◀ 1 2 3 4 5 6 7 ▶

# Ressourcen



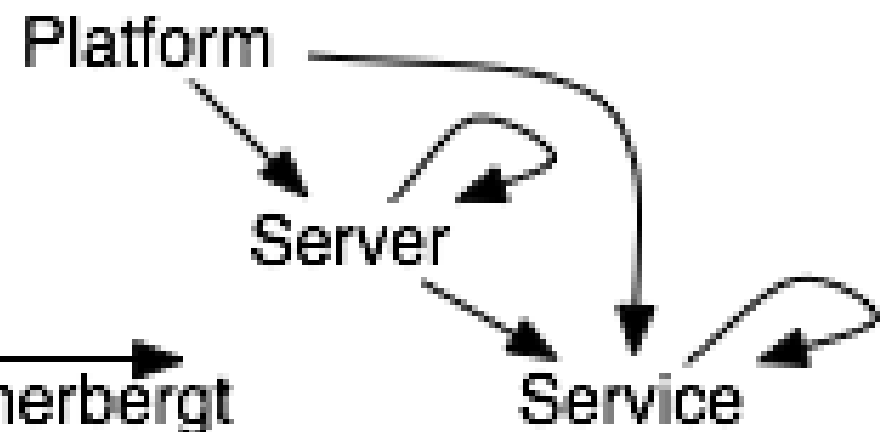
ResourceType

z.B. CPUs, Apache HTTPd

Resource

z.B. JBossAS, eine CPU, ..

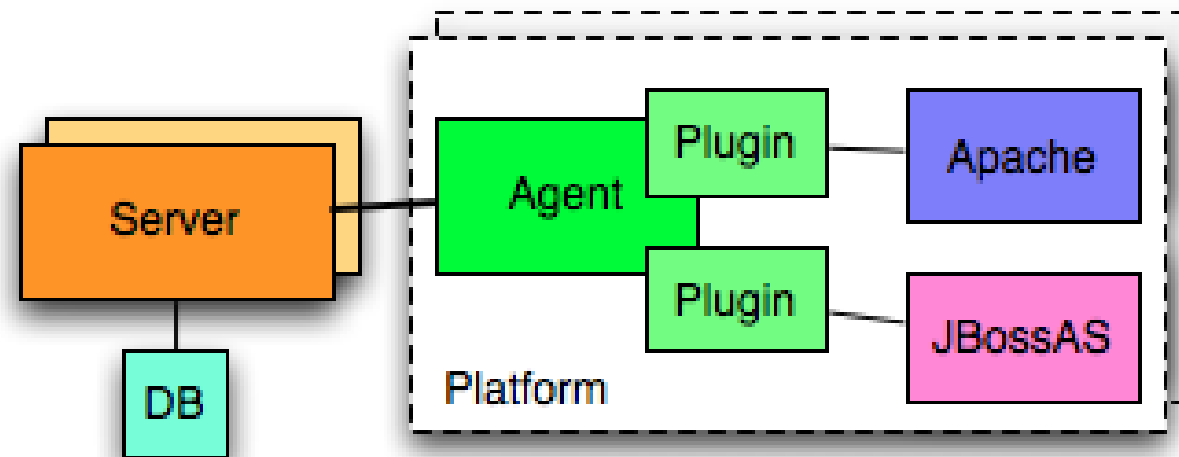
ResourceCategory



# Architektur (1)



- Nabe-Speiche
- Server(Cluster) redet mit DB
  - GUI + CLI
  - Zentrales Inventory



# Architektur (2)

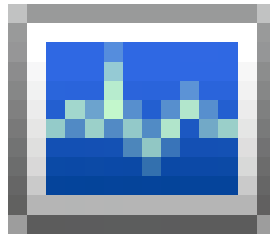


- Agent auf Maschinen
  - Haben Plugins
- Plugins definieren Fähigkeiten
  - Pro Ressourcentyp
- Plugins reden mit Ressourcen

# Subsysteme



## Monitoring





# Subsysteme



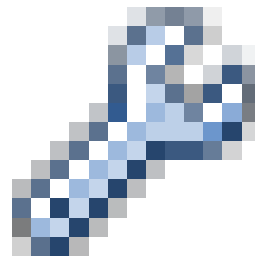
## Events



# Subsysteme



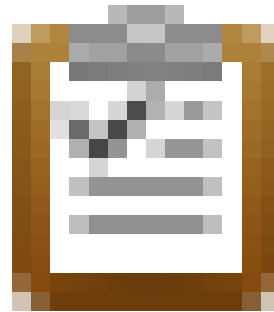
## Configuration



# Subsysteme



Inventory, Create / Delete Resources



# Subsysteme



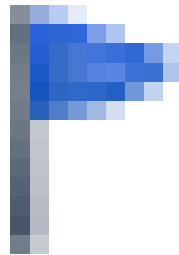
## Operations



# Subsysteme



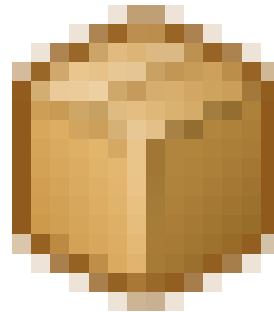
## Alerts



# Subsysteme



## Provisioning



# Subsysteme



- Monitoring
- Events
- Configuration
- Inventory, Create / Delete Resources
- Operations
- Alerts
- Provisioning

# Erweiterungen



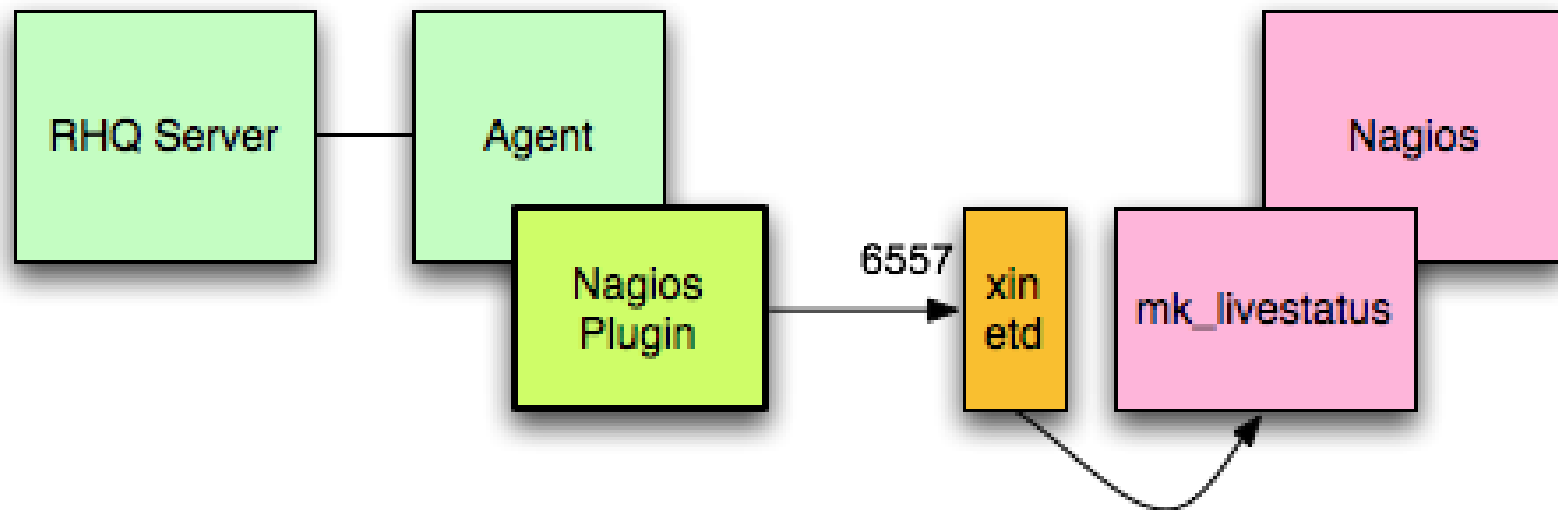
- Plugins in den Agents
  - 2 Java-Klassen + XML Deskriptor
  - Script2-Plugin: Nutzt Jruby
  - PluginGenerator
- Plugins im Server
  - Alarmierung
  - ...



# Nagios-Anbindung



- Via mk-livestatus (Mathias Kettner)



- Aktuell: statische Definition der Ressource Typen
- Geplant: dynamische Erkennung

# Demo



# One more thing ...



## CirrAS

# Danke



Fragen?

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<http://pilhuhn.blogspot.com/>

