Tübix 2017

Image-Scanner für Docker

24.06.2017 – Josef Plendl

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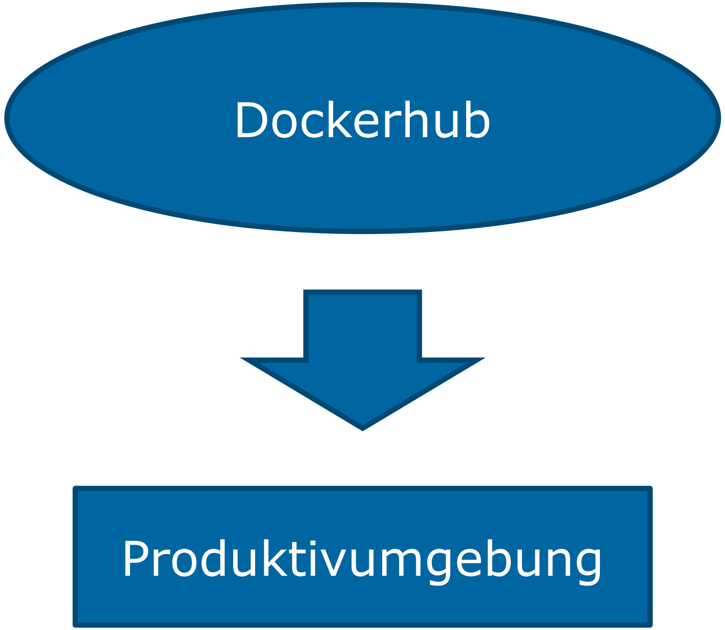
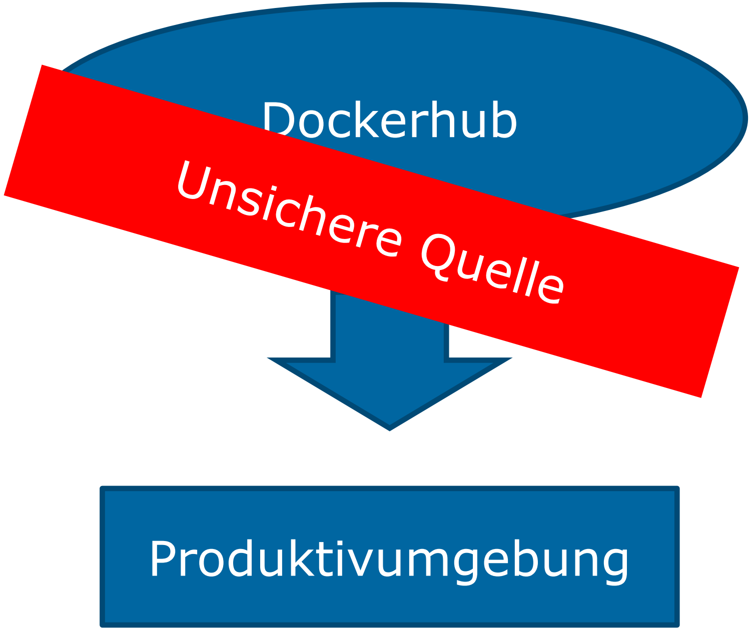
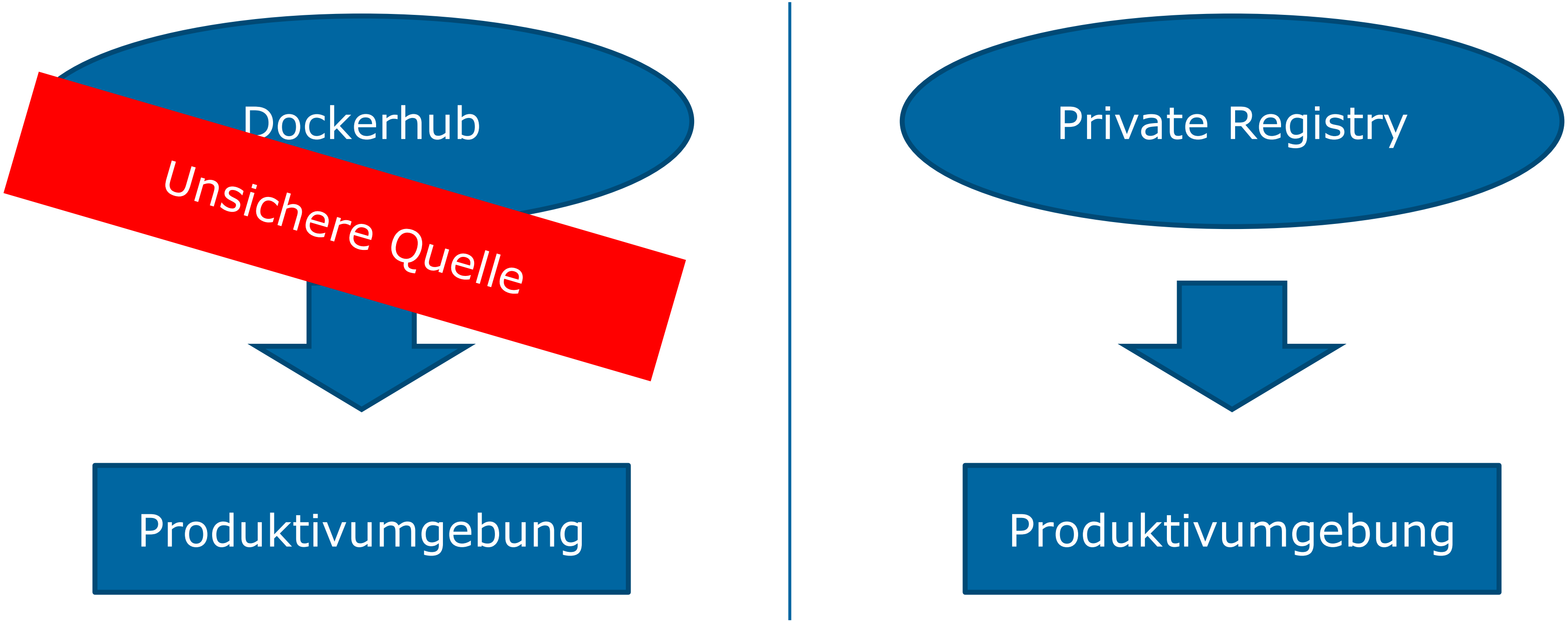
Notwendigkeit



Notwendigkeit



Notwendigkeit



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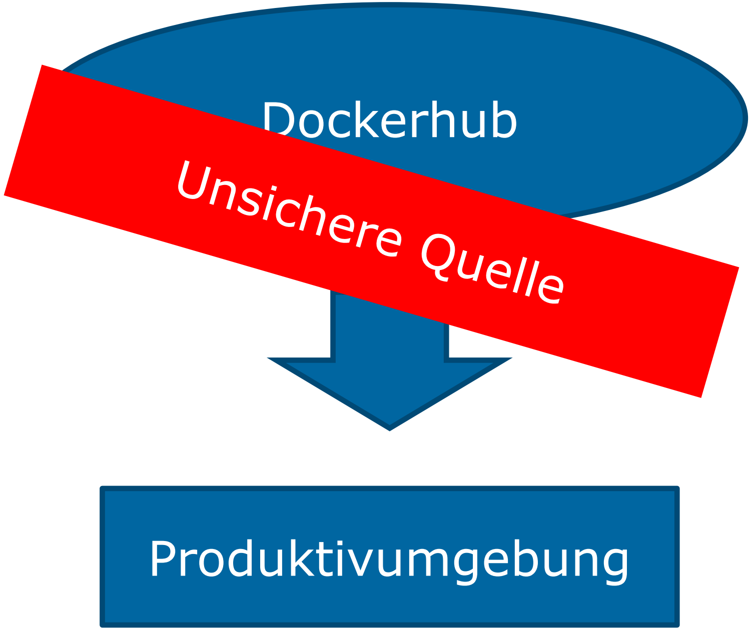

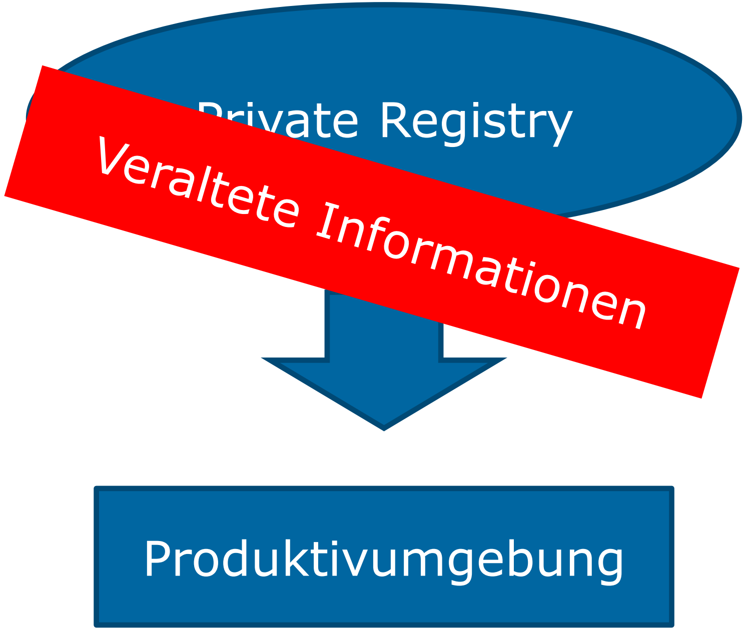

Einschub: Sicherheitslücken

Neue Sicherheitslücke

- Betroffene Hard- / Software
- Auswirkungen / Charakteristika
- Angriffsvektoren
- Risikoeinstufung

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CVE-2017-0144

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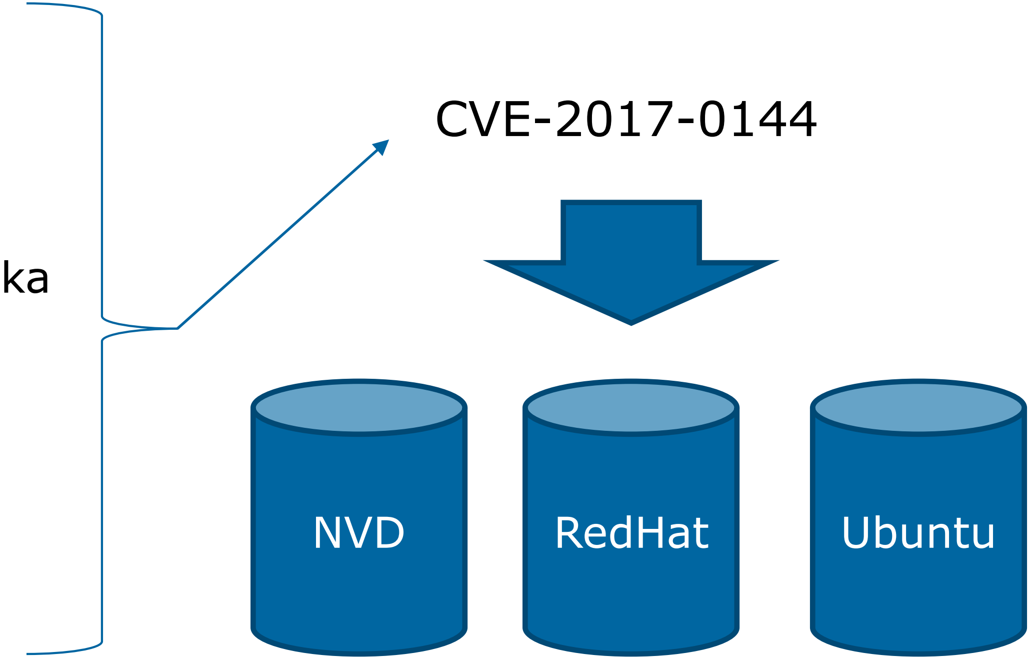

Image-Scanner

Docker: Security Scan

- Docker Cloud
- Docker Hub

Image-Scanner

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CoreOS: Clair

- Quay.io / Enterprise
- Dockyard
- Clairctl
- Klar
- Reg

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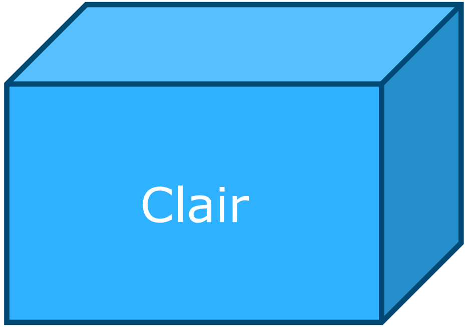
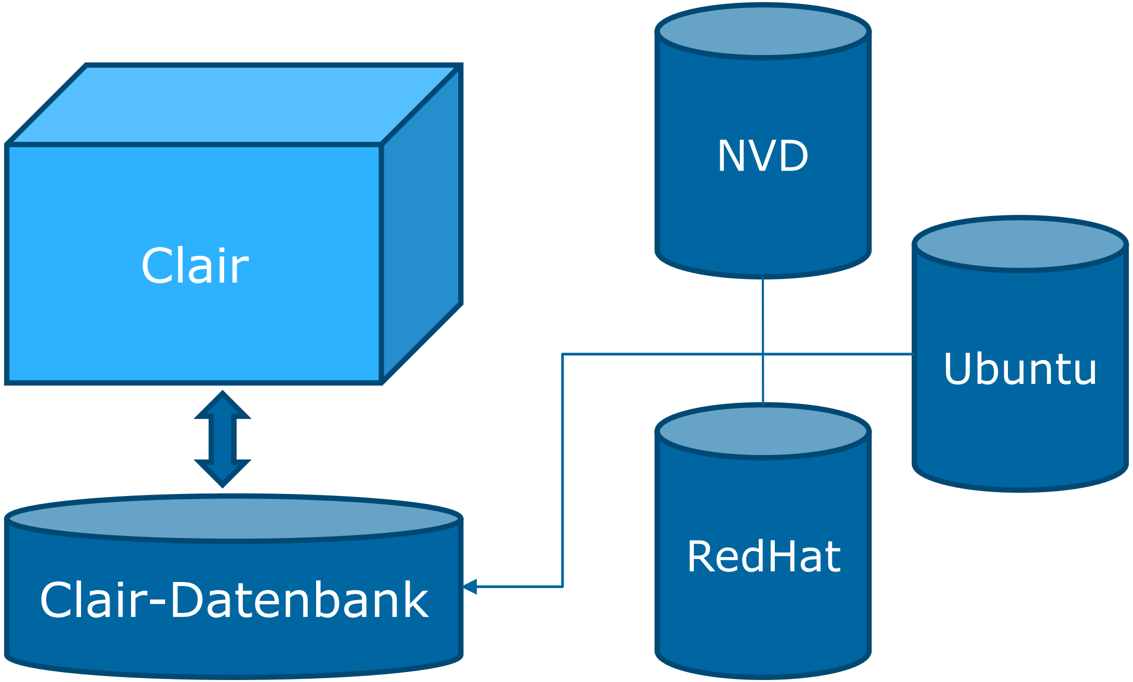
RedHat: Atomic Scan

IBM: Vulnerability Advisor

Clair



Clair



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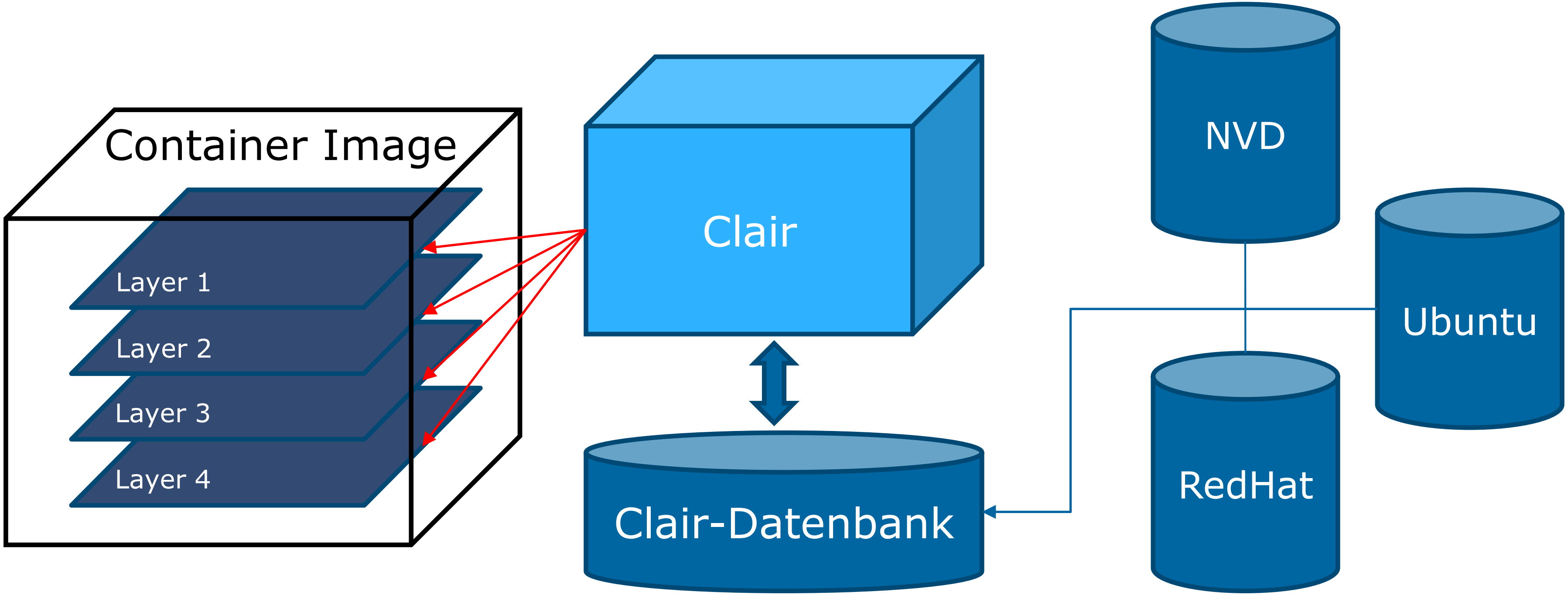
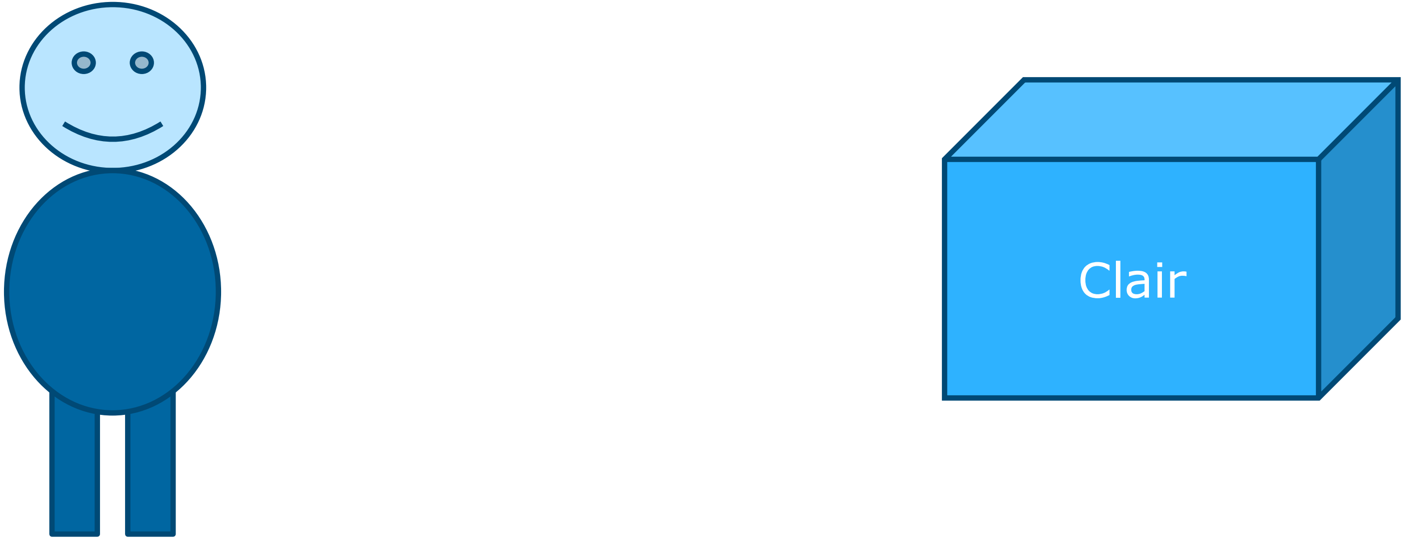
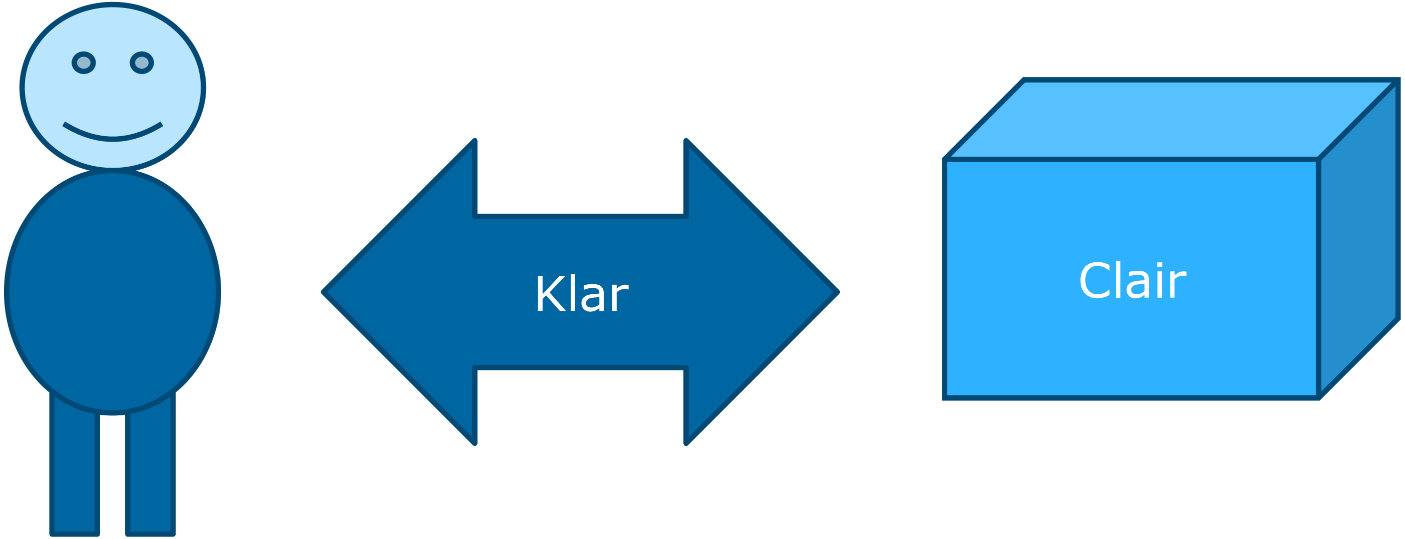

Container Image
Layer 1
Layer 2
Layer 3
Layer 4
Clair
Clair-Datenbank
NVD
Ubuntu
RedHat

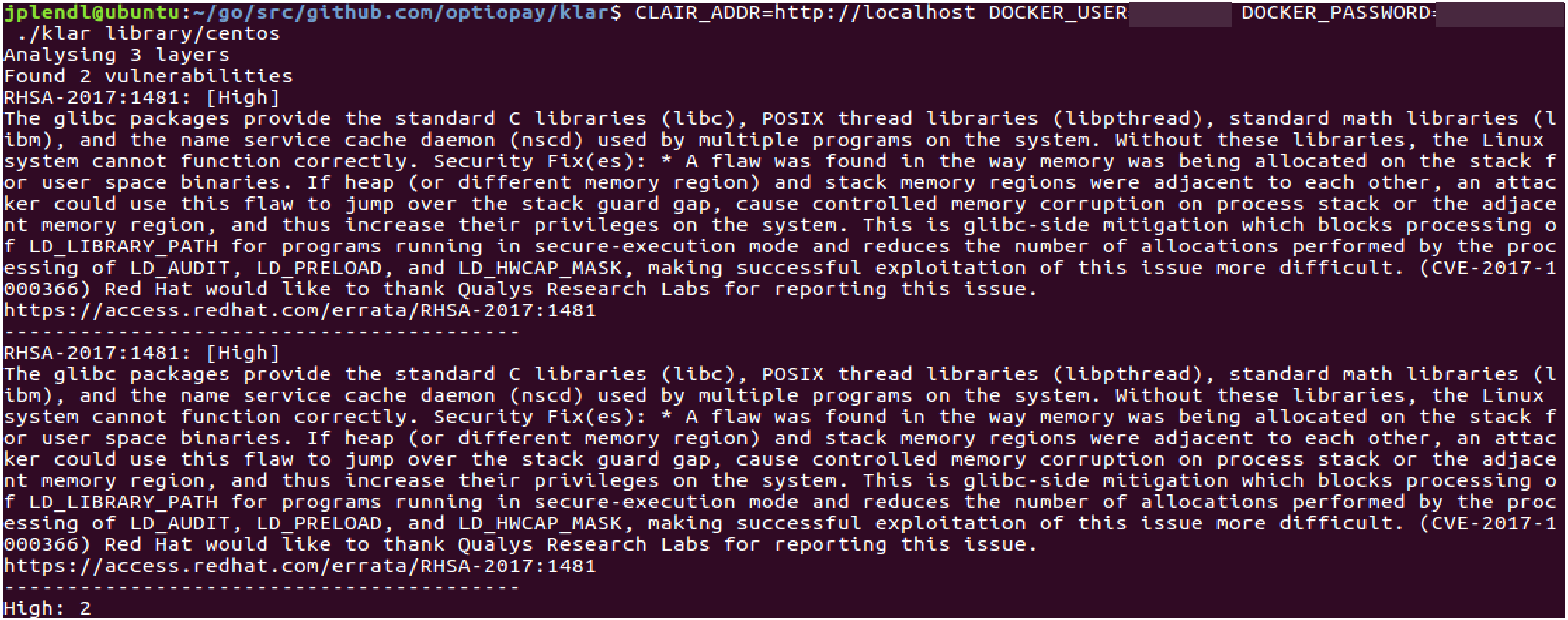
Klar



Klar



Clair/Klar Scan



```
jplendl@ubuntu:~/go/src/github.com/optiopay/klar$ CLAIR_ADDR=http://localhost DOCKER_USER[redacted] DOCKER_PASSWORD=[redacted]
 ./klar library/centos
Analysing 3 layers
Found 2 vulnerabilities
RHSA-2017:1481: [High]
The glibc packages provide the standard C libraries (libc), POSIX thread libraries (libpthread), standard math libraries (l
ibm), and the name service cache daemon (nscd) used by multiple programs on the system. Without these libraries, the Linux
system cannot function correctly. Security Fix(es): * A flaw was found in the way memory was being allocated on the stack f
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ker could use this flaw to jump over the stack guard gap, cause controlled memory corruption on process stack or the adjace
nt memory region, and thus increase their privileges on the system. This is glibc-side mitigation which blocks processing o
f LD_LIBRARY_PATH for programs running in secure-execution mode and reduces the number of allocations performed by the proc
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000366) Red Hat would like to thank Qualys Research Labs for reporting this issue.
https://access.redhat.com/errata/RHSA-2017:1481
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https://access.redhat.com/errata/RHSA-2017:1481
-----------------------------------------
High: 2
```

Vielen Dank

Ansprechpartner für weitere Informationen:

Josef Plendl
T +49 7071 9457-312
josef.plendl@atos.net

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Quellen
Bildquellen:
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https://nvd.nist.gov/
https://github.com/coreos/clair
https://github.com/optiopay/klar