Workload Security with OSSEC

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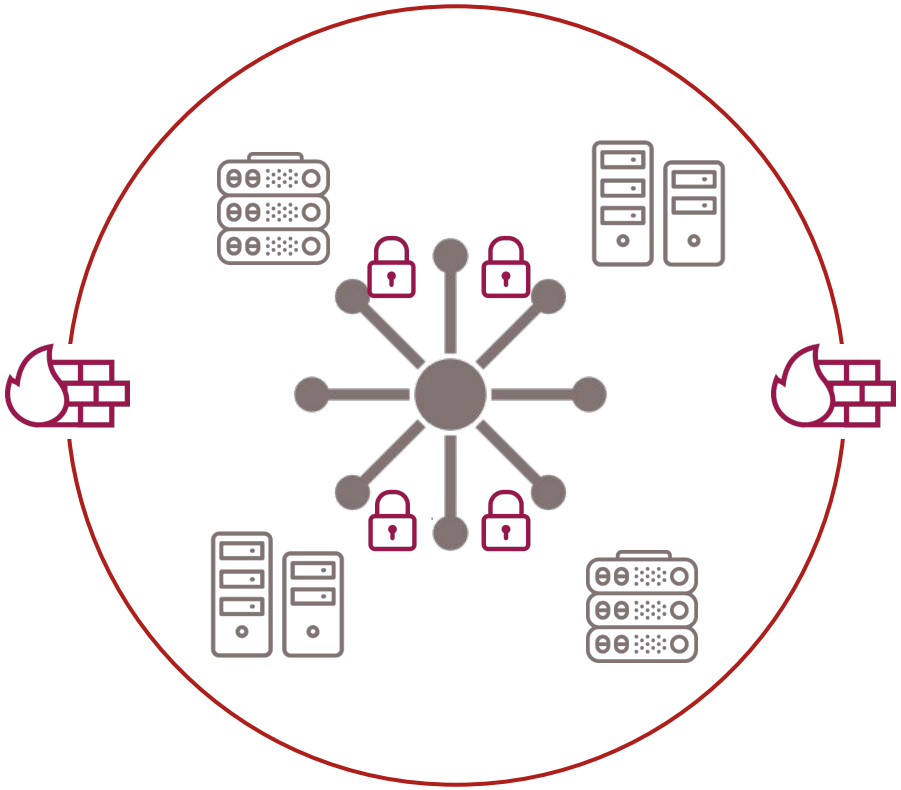
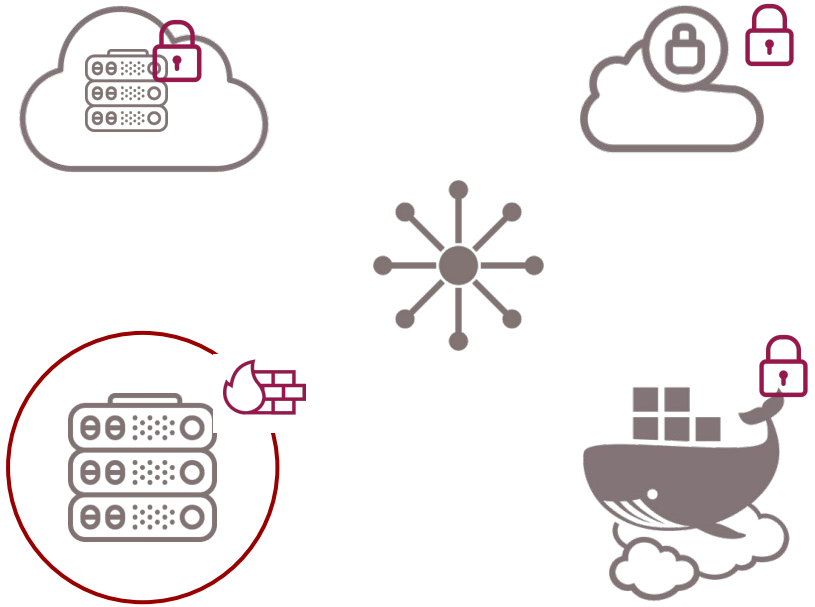
Workload Security is Forever Changed

Yesterday: A Secure Network of Servers



Secure the Network to Protect the Workload

Tomorrow: A Network of Secure Workloads



Workloads Themselves Must be Secured

But I Thought My Cloud Provider Did That...

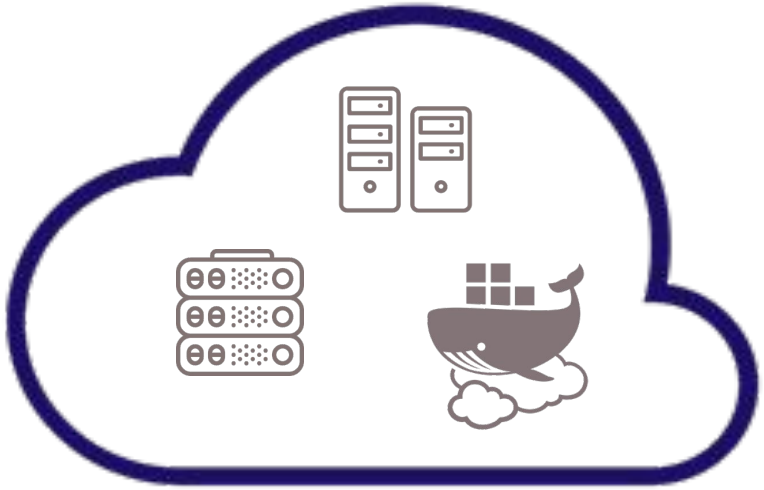
Cloud Provider: Security OF the Cloud

Microsoft Azure

AWS

Google Cloud

Customer: Security IN the Cloud

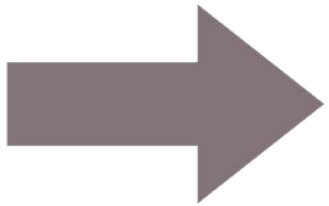


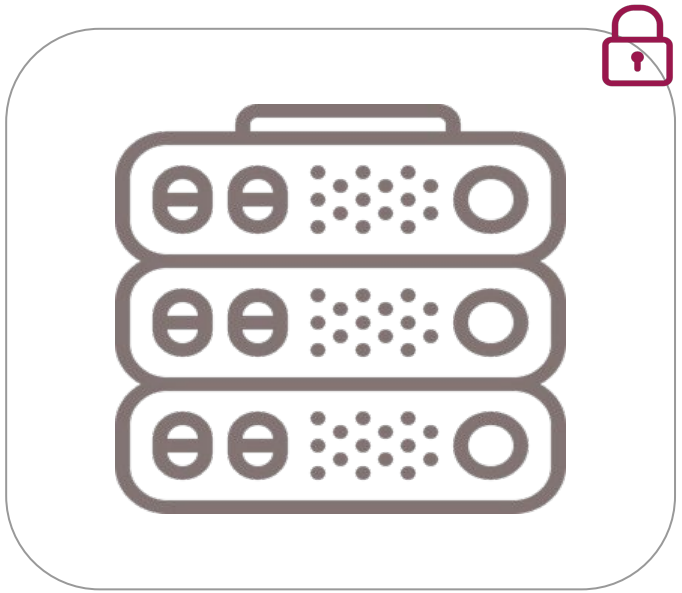
Gartner

“Through 2023 at least 99% of cloud security failures will be the customer's fault.”

Security must be Baked in to Every Workload

Gartner *Market Guide for Cloud Workload Protection Platforms*





Critical Requirements for Workload Security

Comprehensive

Address key security and compliance requirements without requiring a suite of point solutions.

Cross Platform

Protect workloads across physical and virtual machines, containers, and multiple public clouds with a single management interface.

Cost Effective

Scale cost effectively in dynamic public cloud environments where costs are driven by resource utilization.

Active response

Three way we find out about and respond to events in OSSEC

Logs

See Something, Say Something

External integration

Let someone else handle it, but be informed

Examples:

Atomic WAF, ClamAV, Integrator

Internal Integration

Do it yourself

Examples:

syscheck, rootcheck

Pros and Cons of internal integration

Pros

Possibly more secure (isolation and separation)

Possibly faster

Better data

Cons

Harder/Higher LOE :

- you have to write code
- you have to maintain it

Possibly less secure (monolithic)

Pros and Cons of logs

Pros

Quick, really really quick to integrate

Support for almost anything

No need to write code (easier)

Big Picture

Cons

Security of stream, users injecting logs

Decoders

Obfuscation of attacks (eg web attacks)

Reliant on the ability of the application to “detect” an attack

Need to write a response mechanism

lack of logs :-) (FIM)

Pros and Cons of external integration

Pros

If they can generate logs/readable out (eg API), really quick integration!

No need to write code

Specialization (eg WAF, kernel)

Possibly more secure (isolation and separation)

Integration with other platforms/projects

Cons

If you're relying on logs, the same problems as logs

Synchronization (eg rule ids between projects, snort to ossec, modsecurity to ossec)

Overhead

To Repeat Myself: Security must be Baked in to Every Workload

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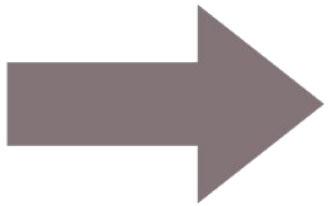

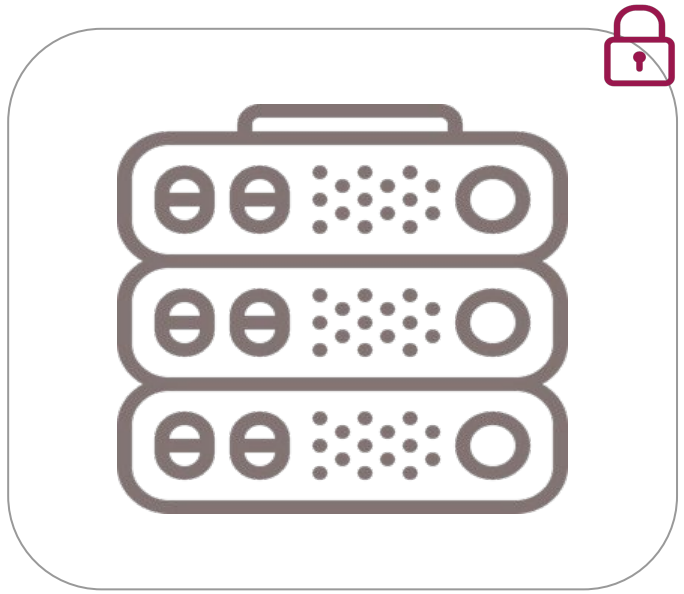

Atomicorp OSSEC Platform

Questions?