CAPSULE8

CAPSULE8 FOR HIPAA COMPLIANCE

A Capsule8 Solution Brief

Capsule8 Protect Address HIPAA Compliance By:

- Protecting system services from unauthorized access to ePHI
- Reconfiguring access settings when there's an emergency
- Allowing review and audit of key activity regarding access to ePHI
- Maintaining ePHI confidentiality

"Capsule8 is a 'must have' solution to meet HIPAA compliance for healthcare organizations that have Linux based ePHI environments."

— DirectDefense, a Cybersecurity Assessment Company

Protecting Patient Data Across Your Linux Production Environment

For healthcare organizations, patient privacy is the number one concern. Keeping patient records secure from external threats, and monitored to prevent and report on inappropriate access, is at the core of HIPAA controls and standards. By the end of December 2018, the Department of Health and Human Services' Office for Civil Rights (OCR) received notifications of 351 data breaches of 500 or more healthcare records, exposing a total of more than 13 million healthcare records. This sensitive information is under constant attack from security threats so it's crucial for healthcare providers to have reliable security controls in place to protect their patients.

Any organization that has information processing capabilities affecting the security of electronic patient health information (ePHI) must comply with the Health Insurance Portability and Accountability Act (HIPAA) Standard. ePHI must not only be maintained in a HIPAA compliant manner, but must ultimately be protected from breaches and improper access. This becomes particularly challenging for companies with complex IT infrastructure, including Linux production environments, which needs to be protected without compromising performance or reliability.

As healthcare organizations seek to meet HIPAA standards and protect their patients, Capsule8 delivers. Capsule8 Protect is a single platform that addresses HIPAA requirements in such areas as File Access Monitoring, Anti-Virus (AV), intrusion detection and prevention systems (IDS/IPS) and File Integrity Monitoring (FIM) for healthcare organizations with a Linux production infrastructure, whether containerized, virtualized or bare-metal.

DirectDefense, a Cybersecurity Assessment Company, conducted an exhaustive third-party HIPAA assessment of Capsule8 Protect including a review of features and live testing of key HIPAA IT security controls focused specifically on protecting systems against intrusions, unauthorized file and system modifications, and unauthorized access. DirectDefense attests that Capsule8 significantly contributes to HIPAA compliance and its core objectives when properly deployed into a Linux environment. Moreover, DirectDefense named Capsule8 "a stand-out among organizations in the Linux security market space."

Capsule8 provides key security controls in an organization's Linux product environment fulfilling multiple HIPAA requirements. DirectDefense noted that Capsule8 is a "must have solution to meet HIPAA compliance for healthcare organizations that have Linux based ePHI environments."

How Capsule8 Helps

Capsule8 monitors an organization's entire Linux infrastructure, detecting and preventing attacks and improper access to keep their production environments safe and stable – whether they live in the cloud, containers, or on-prem.

Using Capsule8 Protect, customers benefit from the ability to secure sensitive patient data by:

- Identifying and protecting against attacks in real-time, including zero-day threats, across Linux production environments
- The Capsule8 system protects data and monitors system access in layers. In addition to traditional methods of scanning and monitoring for compromise, the core of Capsule8's offering leverages policies which identify indicators of attack, allowing your organization to disrupt and stop malicious actors prior to compromise
- Proactive protection, preventing events by detecting them as they happen rather than cleaning up incidents after the fact
- Monitoring virtual and container workloads across your entire Linux production infrastructure

- Strategically (and automatically) killing attacker connections, restarting workloads, or immediately alerting an investigator to respond to attacks before they become incidents
- Integrating with existing systems to ensure interoperability with backend workflows, including SIEMs, log analytics, and forensics tools

HIPAA Security Safeguards/Controls Fulfilled with Capsule8 Protect

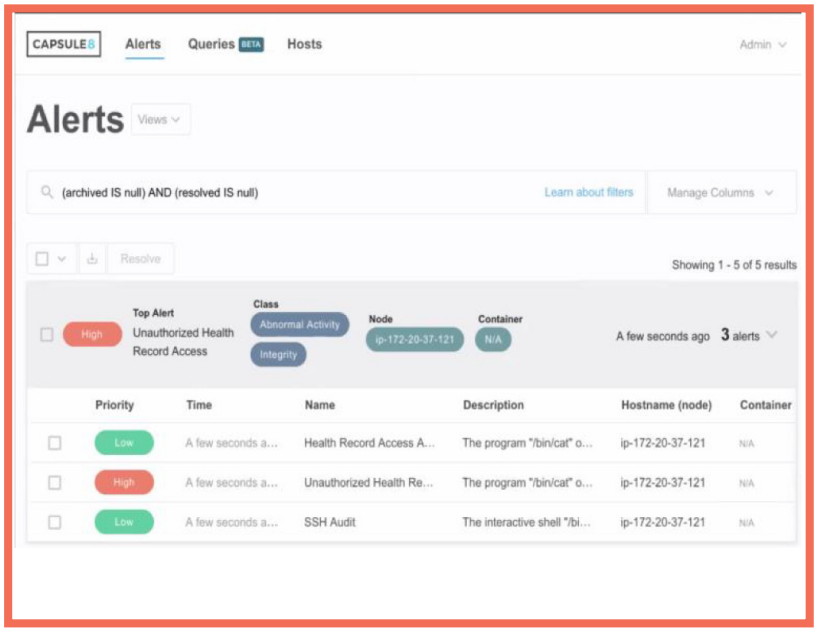
Standard: File Access Monitoring

Example HIPAA Control this Fulfills: 45 CFR §164.312(a)(1)

This requires organizations to implement technical policies and procedures for electronic information systems that maintain ePHI to allow access only to those persons or software programs that have been granted access rights.

How Capsule8 can help:

Capsule8's access policies, called Strategies, protect system services from unauthorized access to ePHI. File access monitoring and alerts on unauthorized program access provide HIPAA compliance capabilities that address this control concerning granular access rights.



Customizable Response Actions Based on Capsule8 Alerts

Example HIPAA Control this Fulfills: 45 CFR§164.312(a)(2)(ii)

This requires organizations to designate a workforce member who can activate the emergency access settings for your information systems.

How Capsule8 can help:

Capsule8 “Strategies” can be created to automatically or manually reconfigure access settings when there is an emergency. In the case of a suspected compromise, a Linux system can be put into a secure mode allowing only key administrator rights to ensure that the system is secure and to re-enable normal operations when conditions are safe again.

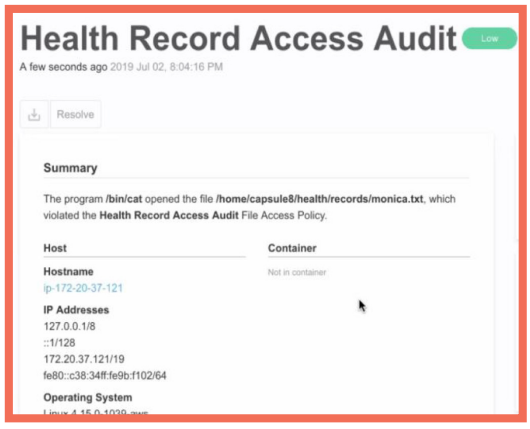
Capsule8 Investigations

Example HIPAA Control this Fulfills: 45 CFR §164.312(b); - basic alerts to the C8 console and lineage also fulfills this control

This requires organizations to implement hardware, software, and/or procedural mechanisms that record and examine activity in information systems that contain or use ePHI.

How Capsule8 can help:

The forensics capabilities of Capsule8 allow review and audit of key activity regarding access to ePHI. All actions pertaining to ePHI are logged, establishing a permanent record that can be used for reporting purposes. Capsule8 applies a risk-based categorization for key audit events (e.g., activities that create, store, and transmit ePHI) in order to determine the scope and magnitude of any potentially inappropriate access.



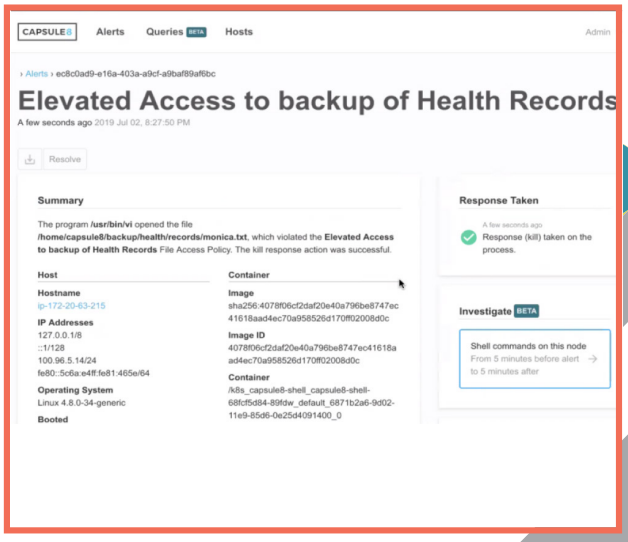
File Integrity Monitoring

Example HIPAA Control this Fulfills: 45 CFR §164.312(c)(1)

This requires organizations to implement policies and procedures to protect electronic protected health information from improper alteration or destruction.

How Capsule8 can help:

Capsule8's integrity-based software protects production Linux systems from unwanted alteration or destruction. Capsule8 reports violations of security policies configured by system operators allowing for complete audit logging of policy violations as well as specific response actions (if desired) for egregious policy breaches. Forensic data is then stored in a database and easily accessible for further investigations.



Capsule8 Protect Strategies and Integrations

45 CFR§164.312(C)(2)

This requires organizations to implement electronic mechanisms to corroborate that ePHI has not been altered or destroyed in an unauthorized manner.

How Capsule8 can help:

Capsule8 "Strategies" protect Linux systems from unauthorized access to services and data. Capsule8 will detect unauthorized changes to ePHI, and file access monitoring and alerts raised due to unauthorized access can play a crucial role in protecting ePHI.

In regard to the Audit Requirement, Capsule8 employs integrity verification tools to detect unauthorized changes to ePHI and provides notifications to management upon discovering discrepancies during integrity verification.

With Capsule8 in place organizations can better develop, document and disseminate among security officers' rules to implement information integrity.

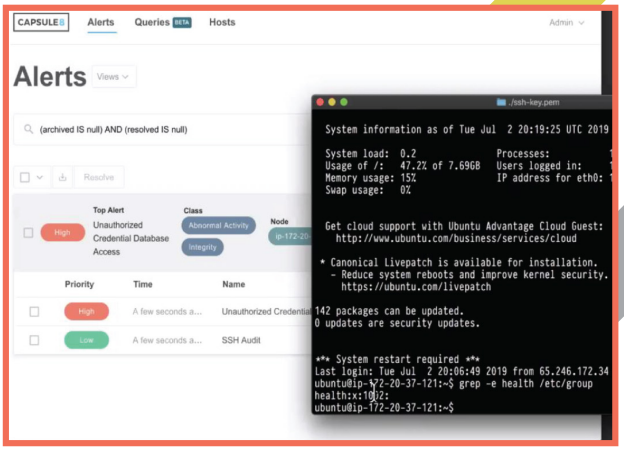
The Ability to Layer Controls in Capsule8 Achieving Defense-in-Depth

Example HIPAA Control this Fulfills: 45 CFR §164.312(d)

This requires organizations to implement procedures to verify that a person or entity seeking access to ePHI is the one claimed; Does your practice protect the confidentiality of the documentation containing access control records (list of authorized users and passwords.

How Capsule8 can help:

Organizations that comply with HIPAA regulations must maintain ePHI confidentiality. Capsule8 provides the ability to craft strategies to take specific actions based on your organization's unique file access requirements. With Capsule8, it is possible to create granular access and enforce/alert on any deviations from the established access controls.



Conclusion

In its attestation, DirectDefense concluded that "Capsule8 significantly contributes to HIPAA compliance and its core objectives when properly deployed into a Linux environment…Capsule8 not only met many HIPAA controls, but also demonstrated, throughout the engagement, that the Capsule8 system will protect your organization's Linux Enterprise from a variety of threats."

The firm added that it "feels highly confident that this company is one of the leading-edge organizations focusing on Linux security today...We believe that Capsule8 is a "must have" solution to meet HIPAA compliance for healthcare organizations that have Linux based ePHI environments."

About Capsule8

Founded in fall 2016 and headquartered in Brooklyn, NY, Capsule8 is the only company providing high-performance attack protection for Linux production environments – whether containerized, virtualized, or bare metal. Capsule8 frees up SecOps teams, while being safe for even the busiest workloads, on the busiest networks. Founded by experienced hackers and seasoned security entrepreneurs, and funded by Bessemer Venture Partners, ClearSky and Intel Capital, Capsule8 is making it possible for Linux-powered enterprises to modernize without compromise.

Learn more at www.Capsule8.com.