

# CLOSING THE LAST GAP IN DATA SECURITY

## THE UNSECURE **DATA TRIAD**



IN USE X AT REST V IN TRANSIT

Extracting value from data by performing actions such as search and analytics requires decryption, creating critical points of exposure. It's far too easy to assume current security practices already have this covered. They don't. Enveil is focused solely on securing this often-overlooked segment of the data triad, closing this gap in data security by protecting data while it is being used. Enveil works alongside existing systems with ease to enhance security and ensure sensitive assets such as Intellectual Property, PII, and other compliancecritical data are protected throughout the processing lifecycle.

**NATION-STATE SECURITY IS NOW** A PRIVATE SECTOR **NECESSITY.** 

 According to the Director of National Intelligence U.S. cybersecurity in both the public and private sectors is at continual risk and should expect increasing attacks from both nation state and non-state actors, especially as those lines continue

 Data and IP-rich businesses are prime targets for state actors using sophisticated techniques, and these attackers often target Crown Jewel data because of its value and the potential for disruption.

**DATA AT REST** 

**DATA IN TRANSIT** 

#### **FOUNDATION-RATTLING FLAWS**

Recent chip flaw disclosures by Intel and others rattled our basic assumptions regarding the protections computers provide. The flaws expose a massive memory attack surface to an often-over-■ looked security risk: the processing layer.

**Critical Intel Flaw** · Flaw "breaks some of the most fundamental protections **Breaks Basic Security** computers promise" **for Most Computers** · Directly affects the major cloud

**Businesses Rush to** 

from Major Chip Flaws

**Contain Fallout** 

operations) · Cracks foundation of long-held

than 95% of data center

security assumptions

providers (Intel chips back more

While the Intel flaw may be the most pervasive example of memory attack surface vulnerabilities we've seen to date, it won't be the last.

**DATA IS THE MODERN WORLD'S MOST** VALUABLE COMMODITY.

**COMPANIES IN THE WORLD BY MARKET** VALUATION ARE DATA COMPANIES

ANALYZE, SEARCH, AND PERFORM CALCULATIONS ON SENSITIVE DATA WITHOUT EVER DECRYPTING ANYTHING, ELIMINATING THE RISKS OF THEFT OR EXPOSURE. WHAT WAS ONCE ONLY THEORETICAL IS NOW POSSIBLE, WITH ENVEIL.

**DECRYPT DATA DECRYPT OPERATION** PERFORM DECRYPTED

**OPERATION** 

**ENCRYPT ANSWER** 

**ENVEIL IS UNIQUELY POSITIONED TO DEFEND DATA AGAINST NATION-**STATE THREATS.

 Enveil is the only company certified to provide nation-state level security in the processing layer;

• Enveil enables protections so effective that the operations could safely be processed in an environment known to be malicious or even actively under attack.

• Enveil provides the ultimate safeguard for your sensitive data while still enabling the value attained through access and use.

### **PLUG & PLAY EASE OF USE**

Enveil allows organizations to securely use data where it is and as it is today, delivering nation-state level security without requiring any system overhauls. By decoupling from the storage technology layer, Enveil is able to sit above the data, requiring no changes to the underlying environment. Enveil's solution is completely API-based allowing users to interact with Enveil the same way that they interact with their data

Recognizing that security teams have invested substantial time and resources in their current security technologies, Enveil works alongside existing systems with ease to ensure protect data throughout the processing lifecycle. By remaining focused on eliminating the Data in Use security gap, Enveil complements data-at-rest and data-in-transit encryption to fill a gap in the overall the data security landscape.



### **HOMOMORPHIC ENCRYPTION**

**ENVEIL'S ZEROREVEAL™** solutions prove not only that the long-pursued theory of homomorphic encryption is market ready, but that it is practical, scalable, and can integrate without any required changes to existing database and storage technologies. Using proprietary technology that has led to 13 patent applications to date, Enveil's groundbreaking use of homomorphic encryption means encrypted operations are run on any type of data at scale, with processing times that ensure minimal impact on user experience.

THE DATA SECURITY TRIAD IN USE O AT REST O IN TRANSIT Enveil provides the first scalable commercial products to protect data when it's most valuable - when it is being used or processed. **IN USE** Whether performing searches or analytics  $\Delta - \circ - \Box - \circ$  $--\Delta$ -0-0-Π-0-Δ- $-\Delta$ -0- $\Delta$ - $-\Box - \circ$ **DATA AT REST DATA IN TRANSIT** 

In the data security landscape, Data in Use has become the point of least resistance for an attacker. Homomorphic encryption can ensure this final piece of the data security puzzle is solved by eliminating the data-in-use security gap."

> **ELLISON ANNE WILLIAMS, FOUNDER AND CEO EN**VEIL

**Achieve Previously** Impossible Levels of **Data Security with Enveil** 

• NOTHING EVER REVEALED **DURING PROCESSING** 

on data you own, seeking information from

a third-party data provider, or driving

revenue by securely monetizing your

data assets, Enveil's ZeroReveal™

solutions ensure nothing is

ever revealed during the entire processing lifecycle.

- PERFORM TRUSTED COMPUTE IN **UNTRUSTED LOCATIONS**
- SECURELY OPERATE ON DATA AT SCALE IN THE CLOUD, ON PREM, OR ANYWHERE IN BETWEEN
- REDUCED COMPLIANCE AND **REGULATORY RISKS**

USE CASES:



- Never reveal competitive Safely use data in the Cloud advantage



Crown Jewel **Data Protection** - Ensure data is protected Eliminate risk of exposure



Reduce liability - Ensure compliance

Close the last gap in data security. Never decrypt. | enveil.com