

Better than gold:

Compass™ InfoSearch is air-gapped cold storage that is fully searchable with a fully homomorphic encryption (FHE) index.

It's the holy grail of data protection.

ThinkOn



Your data is only one quantum computer away from being jeopardized

Here's what encryption experts know—the rapid advance of quantum computing technology threatens the encryption schemes you're currently using to protect your data.

Research suggests that a processor with roughly 20 million qubits could break public-key cryptography algorithms. By 2030, these processors will exist.

Forget eternal youth.

We're bringing you infinite data security with long-term data storage that combines a fully homomorphic encryption (FHE) index with isolated, multi-factor artifact access and a true air gap—Compass™ InfoSearch powered by ThinkOn.

The quest for the ultimate encryption

We all know that unencrypted data is never entirely secure—no matter how good your perimeter security. So, you keep your data encrypted.

But what happens when you need that data to gain insights?

How do you take advantage of advanced data analytics, artificial intelligence, and machine learning to develop new products and engaging experiences for customers in the digital world—all while protecting the underlying data?

Present encryption technology offers security only during transport and storage. The data needs to be in plain text during computation, making it vulnerable—especially in the cloud or when shared.

Cryptographers have long been on a quest to create their holy grail—a usable and practical encryption scheme that facilitates arbitrary computation on encrypted data and is able to fend off quantum computer attacks. That holy grail is Compass™ InfoSearch.

In the past, FHE has been notoriously slow and challenging to apply inside business environments. But recent breakthroughs in mathematics research have slayed that data dragon, leading to practical, meaningful applications of FHE.

With FHE protecting your indexed data, you can securely search your data without decrypting it, permitting secure collaboration between non-related parties, long-term privacy regulatory alignment, and safe searching of unstructured data.

A knight in shining armor for your data protection

Impenetrable data protection is within your grasp—unyielding to ransomware and impervious to data spillage, leakage, and theft.

ThinkOn's Compass™ InfoSearch features an FHE protected index, secure cold storage with a true air gap, and a multi-factor delegated data access approval process. Together, these three elements combine to create the elusive holy grail of data protection—Compass™ InfoSearch.

Search cloud data securely, privately, and with ease

Our world-class FHE protected index makes fast work of data search and analytics.

Generate insights from sensitive data without risking exposure.

Share your data on your terms

With Compass™ InfoSearch, you can enable secure data

collaboration between nonrelated parties. Crisp, clear data for you and anyone you choose to share it with. Nothing but nonsense for everyone else.

Trust no one, not even your future self

Future-proof your data by establishing a zero-trust cloud environment for the long-term archiving of digital assets. Be aligned with international regulatory standards and reduce your risk of exposure.

Why secure your data now for the future?

Because targeted data types will still be valuable when technology catches up, and forward-thinking threat groups steal encrypted data today with plans to crack it late¹.

But with a full air gap and FHE encryption, you can have your data lake and securely compute it too.

A hard truth:

Unless you have FHE, your index is not safe.

If data can only be read when unencrypted, it's vulnerable to theft.



With Compass™ InfoSearch, you can keep your filing cabinet locked and secure the key

Digital data archiving is accelerating while quantum computers are gaining computational power. These two realities necessitate a storage solution that both empowers organizations through data search and analytics capabilities and protects their most valuable asset.

Back when we relied on paper trails, finding information was slow and arduous and the contents of your wall of filing cabinets were at risk. Anyone or anything could happen to those files—from theft to fire. Often, originals got misplaced or destroyed.

When we went digital everything got easier and safer, with indexes, algorithms, and backup solutions. But as technology evolves, so do the elements that threaten it—ransomware, unauthorized access, and soon, the computational power of quantum computers.

Each time you open your stored files to access the data you need you're leaving yourself vulnerable. The more you interact with content in the protected environment, the higher the likelihood of it being exposed, corrupted, lost, or stolen.

The future of data protection is here

To protect your digital artifacts, ThinkOn has created a fireproof, tamperproof, locked filing cabinet that incorporates an FHE protected index, impervious to threats and inaccessibly stored inside a vault.

Access to the original data requires the approval of two or more authorized individuals who are authenticated using multiple factors. To further protect your data, the approval console is isolated from the data inside the file cabinet.

Because the original never leaves your single source of truth storage, you don't have to worry about it. You could lose everything else, but your original artifacts remain untouched and intact.

FHE protected indexing and air-gapped storage are imperative for enterprises in regulated industries, governments, national security and healthcare organizations, research and design companies, telecommunications, and financial institutions.

ThinkOn's Compass™ InfoSearch is one of the world's first commercial implementations of FHE. The future of data protection is here, and we're bringing it to our customers at a low cost.

The logo for ThinkOn, featuring the word "ThinkOn" in a white, sans-serif font. The letter "O" in "On" is stylized with a white outline and a small white dot in the center, resembling a power button or a stylized 'O'.

Reach out.
We're here to help!

www.thinkon.com/contact/

General Sales:
sales@thinkon.com

¹Tung, Liam. ZDNet November 30, 2021. "Hackers could steal encrypted data now and crack it with quantum computers later, warn analysts." <https://www.zdnet.com/article/chinese-hackers-could-steal-data-now-and-crack-it-with-quantum-computers-later-warns-report/#:~:text=Recent%20studies%20suggest%20it%20would,could%20be%20built%20by%202030>