

Elevating your Google Cloud security with External Key Management

2023

75%

Gartner



2020

50%

According to Gartner, 75% of security failures will result from inadequate management of identities, access and privileges by 2023, up from 50% in 2020.

Organizations often settle down on meeting the minimum requirements instead of implementing proper cybersecurity practices.

For instance, while most regulations and mandates include data encryption, few regulations address encryption key management in depth.

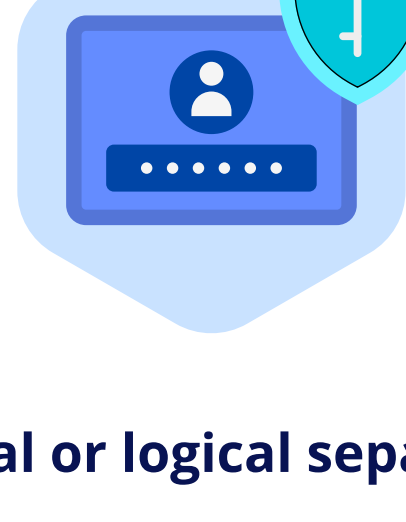
What's required is to use encryption for effective security-

One of the fundamental tenets of encryption and data security is to store the keys separately from the data that is being encrypted and store it in a place where only authorized personnel have access to it.

Security best practices require:



Protection of sensitive data with encryption



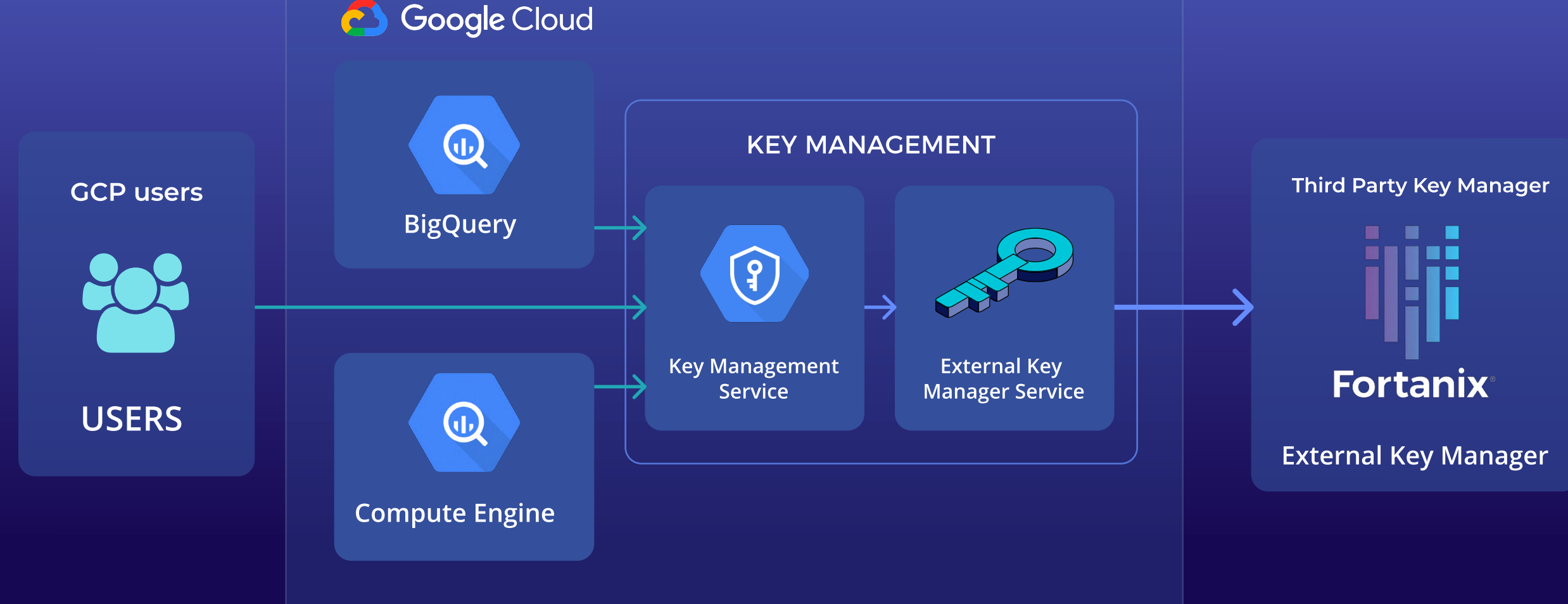
Physical or logical separation of:

- ✓ Data encryption keys (DEK) from sensitive data
- ✓ Protection with strong key encryption keys (KEK)

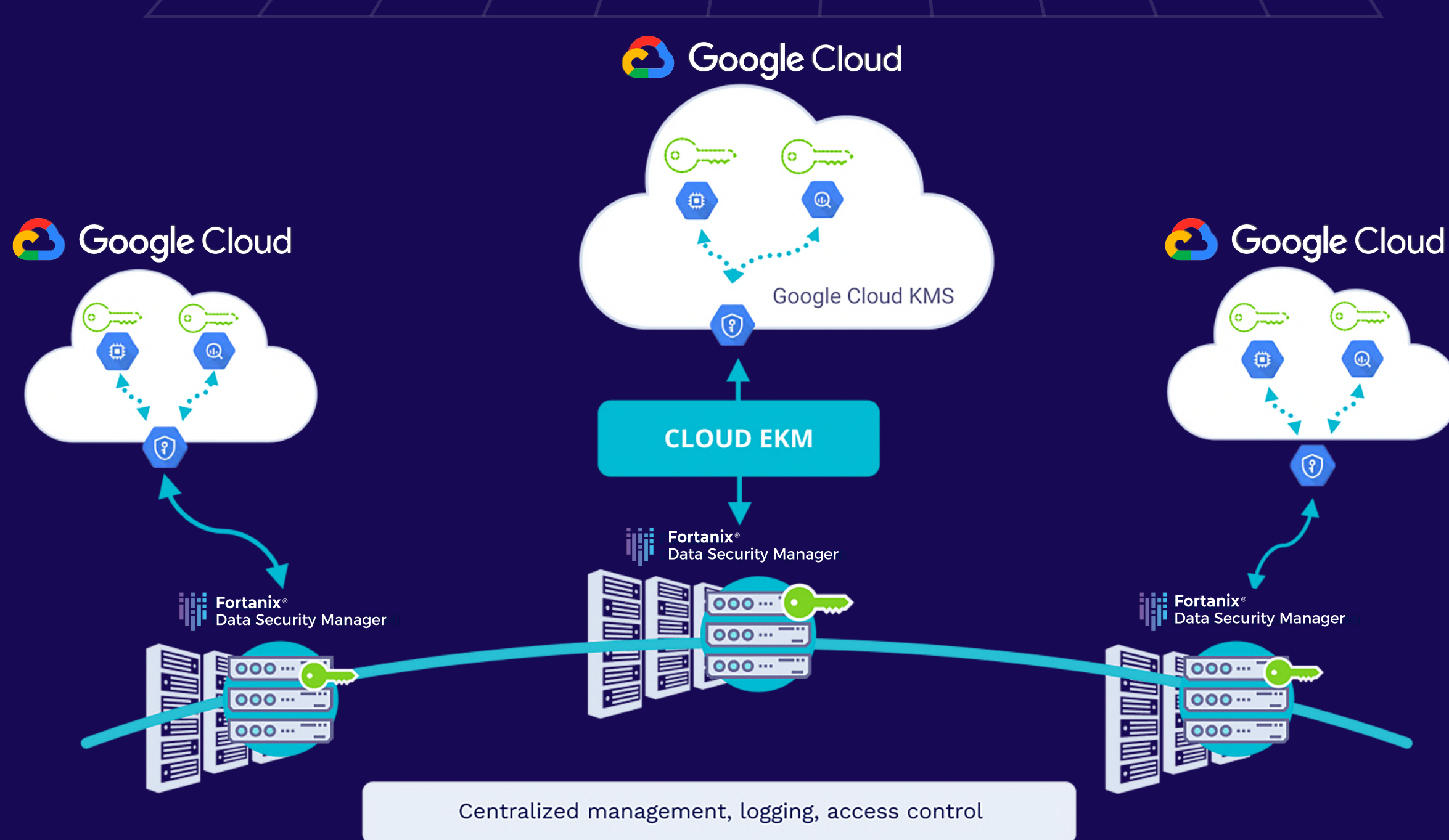
And that is the gap that **Google External Key Management** is trying to bridge.



With Cloud EKM, users can now:



Fortanix integrates with Google Cloud Platform's External Key Manager service to enable organizations to move the data to the cloud and get the same level of security for keys that they're used to in their own on-prem environments.



External Key Management



Runtime Encryption Protection



FIPS 140-2 Level 3 HSM

Fortanix is certified to FIPS-140 -2 Level 3 – the highest level for a software-based key management solution – ensuring robust encryption key management functionality.

Why Fortanix

- ✓ The solution can be consumed as a service most suited for cloud migration.
- ✓ Hold the master keys in a FIPS 140-2 level 3 certified HSM, keys are never cached or stored in Google Cloud.
- ✓ Supports all GCP services like BigQuery, Compute Engine, Artifact Registry and more.
- ✓ Disable the keys and prevent data access with Kill switch.
- ✓ Maintain full control and visibility into key creation, location, and distribution of cloud keys.
- ✓ Integrated service supports multiple enterprise key management use cases (database TDE, storage encryption, PKI, etc.)
- ✓ Clustered cloud-native architecture ensures high-availability and disaster recovery.