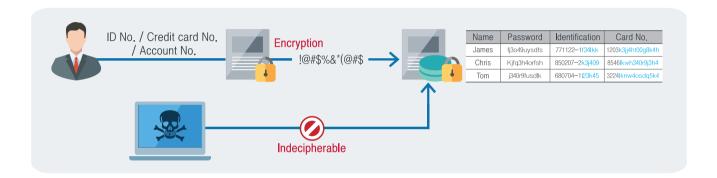
# HancomSecure DB

# DB Encryption Solution to protect typical/atypical data and provide non-disruptive service for encryption key lifecycle

HancomSecure DB is a complete DB encryption solution that encrypts database (DB). protects critical data and confidential files, and guarantees data confidentiality from information leakages.



# **Key Features**

#### Verified Solution

- Broad encryption algorithms support (SEED, AES, DES, RC5, ARIA, FPE, OPE, compression encryption, etc.)
- Korea Cryptographic Module Validation Program (KCMVP) certified module
- GS (Good Software) certification, SAP integration certification

## HSM-based Key Lifecycle, Integrated Key Management

- No risk on key hijacking by a built-in HSM module (FIPS 140-2 Lv.3 certified)
- Non-disruptive serviced encryption on a new key generation when needed
- Real-time service for scheduling back migration key change
- Centralized management for all keys from DB and atypical data encryption

#### Atypical Data Encryption

- API-based atypical data sorting (file types, directory) and encryption
- Non-disruptive serviced Real-time Key Change and Back Migration Key Change support

  Scheduling multi-thread primary encryption support
- IP/MAC access control

#### **Encryption Scheduling**

- Creation of encryption process optimized to the table to encrypt
- Batch encryption scheduling supporting simultaneous execution of Multi Instance and Thread
- Duplication of encryption scheduling to make repetitive encryption transfer test easier

# High Availability and High Performance

- Encryption of API / Plug-in / Hybrid configuration for each customer's IT environment.
- Non-disruptive service with HA configuration of policy server on policy server failure
- Support NIST standard Format-Preserving Encryption (FPE)
- Support Order-Preserving Encryption (OPE) for Index

## Encryption Data Compatibility between Operational System and ERP

- Encryption without data size change
- Compression encryption (unique patent): number
- FPE (patent) and alternative key: number and character

#### Integrated Audit Log

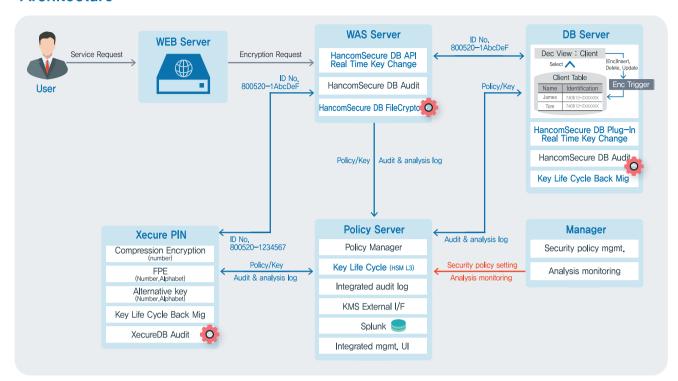
- Integrated audit policy setting
- High-speed audit log using shared memory 7X better performance
- Minimize service traffic influences through compression
- /packaging transmission

  High-speed loading through audit log merging
- Big Data (Splunk) integration support

## Support operational, DW and embedded environments

- Operation: Oracle, Sybase, MySQL, Tibero, MS-SQL, DB2, etc.
   DW: TeraData, HP Vertica, Exadata, etc.
- Embedded environment: POS, PDA

#### **Architecture**



# **Strong Points**

#### HancomSecure has applied its unique patented technologies to DB encryption

- Guarantee search speed with partial encryption patented technology
- High performance encryption without data size increase through compression encryption
- Provide non-disruptive encryption service even in policy server failure with Sync encryption technology
- Real-time key change and back migration key change for encryption keys without service interruption
- Provide initial encryption scheduling for optimized concurrent execution on multi instance and single instance environments

# Reference Sites (over +200 customers)









































