

IBM Database Encryption Expert for Linux, UNIX and Windows

Highlights

- **Protects sensitive data-at-rest in both online and offline environments**
- **Provides DB2 database file and tablespace level encryption without affecting database structure and schema; operates transparently to the DBMS and other applications**
- **Encrypts DB2 backups to both disk and tape, ensuring data in offline storage environments cannot be compromised**
- **Provides a unified policy and key management system to centralize and simplify data security management from a single database to multiple databases**
- **Deploys easily and operates transparently to the network, storage or applications.**

Secure and protect DB2 data

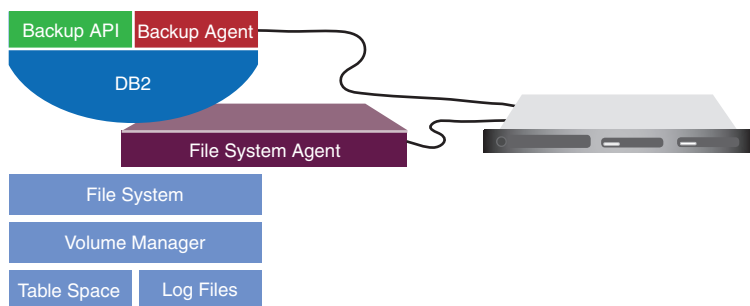
Global enterprises and governments alike are experiencing an alarming rate of malicious activity from both external and internal sources directed at sensitive data such as corporate financials, credit card transactions, medical records, intellectual property, private consumer and employee information. IBM Database Encryption Expert is designed to help organizations protect and secure confidential and sensitive data in both online and offline environments.

Secure and encrypt DB2 backups

In an IBM DB2® environment, information occasionally needs to be moved to an offline storage format. Moving any data makes it more vulnerable. IBM Database Encryption Expert can help prevent a data breach by encrypting data as it moves to offline storage on both disk and tape.

Secure and encrypt DB2 database files

IBM Database Encryption Expert can also protect DB2 database files by encrypting and controlling access to those files. Database Encryption Expert ensures that sensitive DB2 data is protected against privileged IT staff who have a significant amount of systems access.



Compliance

Along with the skyrocketing rate of data exposure has come heightened activity from legislators and regulators to safeguard sensitive enterprise data. A number of regulations now require executive officers to ensure the privacy and confidentiality of electronically stored data. These directives include the Health Insurance Portability and Accountability Act (HIPAA), PCI Data Security Standard (PCI-DSS) and the Gramm-Leach-Bliley Act (GLBA) and the multitude of State Breach Notification Laws. Many specify data encryption as a requirement or best practice.

IBM Database Encryption Expert is designed to help organizations comply with these regulations and legislative acts to ensure that private and confidential data is secure.

Protection against internal and external threats

Organizations must contend with a multitude of rapidly evolving threats to sensitive and private data. Database Encryption Expert is designed to protect against not only unauthorized attempts to view files, but also attacks against the database operating environment that could lead to a compromise of sensitive data.

The threat matrix below illustrates common data security threats and the corresponding counter-measures provided by Database Encryption Expert:

Threat	Encryption	Host Access Control	Audit & Forensics
Root/System User	X	X	X
Direct Access to File	X	X	X
Unauthorized Viewing/ Logfile Tampering	X	X	X
Stolen/Lost Media	X		
Access by Unauthorized Application		X	X

IBM Database Encryption Expert integrates the following data security controls:

1. Encryption of DB2 backups to disk and tape
2. Encryption of DB2 database files in online storage*
3. Access control to data by user and application
4. Security for the DB2 operating environment
5. Secure and proven key management
6. Audit accesses to protected data

These controls help organizations enforce policy-based data security rules that satisfy data privacy-based compliance needs. Capabilities include:

- **High-Performance Encryption** – *performs encryption and decryption operations with minimal impact to database and application performance.*
- **Context-Aware Access Control** – *ensures that only authorized applications and processes can access protected data, and support established data classification and acceptable use policies.*

IBM Database Encryption Expert easily integrates into a DB2 environment to protect data backups and database files.

For more information

IBM is a trusted source for data protection systems. IBM Database Encryption Expert continues IBM's long-standing goal of helping customers find solutions to evolving data security needs. To learn more about how IBM Database Encryption Expert can help you manage and protect your sensitive data, contact your local IBM Business Partner or visit: ibm.com/software/data/db2imstools.



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Silicon Valley Laboratory
555 Bailey Avenue
San Jose, CA 95141

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*IBM intends to provide support for online storage in the V1.1.1 delivery.



TAKE BACK CONTROL WITH **Information Management**