# Adabas Encryption for z/OS®

**Protect your Adabas data against access by unauthorized agents**

Adabas Encryption for z/OS helps you protect your data and stay fully compliant with growing security regulations. Encrypt your entire database, or specific data sets, using the powerful and secure hardware-based native encryption capabilities on IBM Z .

## Apply industry-leading security, maintain database performance

Organizations running Adabas on IBM z/OS have generated decades' worth of valuable information including financial data, personal files and proprietary business material. Growing regulatory demands, combined with a need for ever-stronger cybersecurity measures, make it critical for organizations to protect their information against unauthorized access.

IBM Z provides secure, high-performance encryption functions to enable industry-leading data security. Adabas Encryption for z/OS leverages these cryptographic services in an easy-to-use tool that helps organizations protect entire databases, or specific data sets, in a streamlined process. Now, you can maintain high performance databases while boosting security and staying compliant with a growing list of regulations such as HIPAA, SOX, PCI DSS and GDPR. Using Adabas Encryption for z/OS alongside Adabas SAF Security simultaneously secures and encrypts your data at rest. Used alongside Encryption for Entire Net-Work, you can also secure your data in flight. Together, these tools help keep your Adabas systems secure and reliable for years to come.
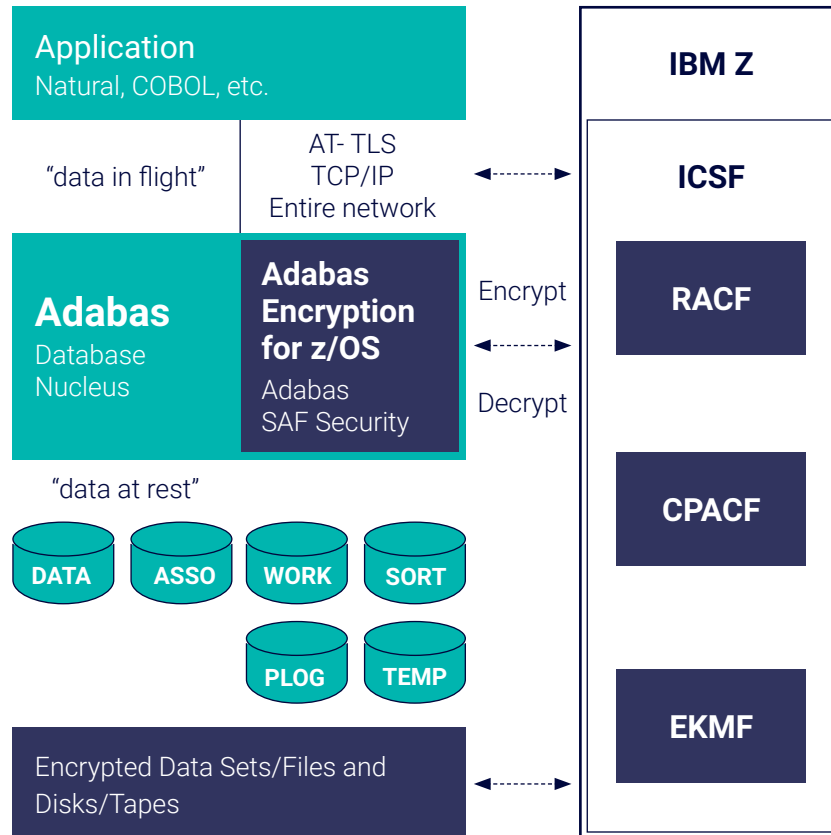
## Complete protection

To secure and encrypt your data at rest, Adabas Encryption for z/OS is the perfect partner to Adabas SAF Security. Adabas SAF Security ensures your data is secured with proven, industry standard security methods used by most IBM z/OS and compatible sites. You can control system resources by using profiles and connecting directly with external security tools such as IBM RACF®, CA-ACF2® or CA-Top Secret®. This single control and audit system for all your resources minimizes administrative efforts so you can focus on the tasks at hand.

Once your data is secured, encrypt any or all of your Adabas files using Adabas Encryption for z/OS.

# Key benefits

- Comply with evolving data protection regulations efficiently and completely

- Protect your data against access by unauthorized agents

- Leverage the security and reliability benefits of hardware-based encryption and key management on the IBM Z platform

- Maintain fast database performance with selective data encryption

- Out-of-the box vendor-supported solution

| | IBM Z |
|---|---|
| **Application**<br>Natural, COBOL, etc. | |
| "data in flight" — AT- TLS / TCP/IP / Entire network | **ICSF** |
| **Adabas** Database Nucleus / **Adabas Encryption for z/OS** Adabas SAF Security — Encrypt / Decrypt | **RACF** |
| "data at rest" | **CPACF** |
| DATA ASSO WORK SORT / PLOG TEMP | |
| Encrypted Data Sets/Files and Disks/Tapes | **EKMF** |

# Key capabilities

### Customize encryption
Choose the extent of data encryption that suits your needs: encrypt your entire database, or encrypt specific data sets at the file level.

### Maintain performance with targeted security
Encrypt only the necessary data to streamline the process and reduce CPU use.

### Simplify enterprise key management
Streamline periodic encryption keys changes using IBM's secure key and certificate management system.

## Maintain access for authorized utilities

Deliver uninterrupted data to authorized programs, users and services. All Adabas utilities can work with encrypted data without requiring changes.

## Simplify management

Manage your database with existing utilities for loading, unloading, restore, backup and other functions.

## Support your IBM zIIP™ investment

Adabas Encryption for z/OS is fully compliant and functional for customers offloading work to zIIP processors.

# How it works

IBM Z provides your organization with a range of capabilities leveraged by Adabas Encryption for z/OS, including hardware-based encryption and functions to manage access and enterprise keys. The first step to a comprehensive enterprise data encryption solution is to configure your Z system for encryption services.

Recent Z models are equipped with a software element called Integrated Cryptographic Service Facility (ICSF), which works with existing hardware to provide features including:

- Resource Access Control Facility (RACF) supports data privacy by making access control decisions through resource managers, with access granted only to authorized users.
- IBM Enterprise Key Management Foundation (EKMF) is a highly secure key management system that provides a centralized service for streamlined, efficient and secure key and certificate management.
- Central Processor Assist for Cryptographic Function (CPACF) provides performance improvements in hardware acceleration, making it cost-effective to support pervasive encryption.

With your Z system configured, you are ready to start using Adabas Encryption for z/OS to protect your data and stay in regulatory compliance.

# Take the next step

To learn more, contact your Software AG representative or visit us at **www.adabasnatural.com.**