

ORACLE ADVANCED SECURITY

KEY FEATURES AND BENEFITS

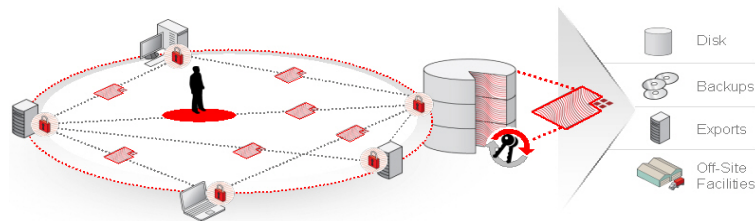
- Transparently encrypt data with no application changes
- Built-in key management
- Encrypt sensitive columns or entire tables with tablespace encryption
- Encrypt entire database exports and backups to disk
- Encrypt network traffic
- High performance
- Support for centralized key management using 3rd party hardware security modules (HSM)
- Industry standards – AES, 3DES, PKCS#11, X.509

Oracle Advanced Security helps customers address regulatory compliance requirements by protecting sensitive data on the network, on backup media and within the database from unauthorized disclosure. Oracle Advanced Security transparent data encryption provides the industries most advanced encryption capabilities for protecting sensitive information without requiring any changes to the existing application.

Overview

Oracle Advanced Security, an option to Oracle Database 11g, helps address privacy and regulatory requirements including the Payment Card Industry Data Security Standard (PCI-DSS), Health Insurance Portability and Accountability Act (HIPAA), and numerous breach notification laws. Oracle Advanced Security provides data encryption and strong authentication services to the Oracle database, safeguarding sensitive data against unauthorized access at the network, operating system or through theft of hardware or backup media. Oracle Advanced Security benefits include:

- No application changes
- Built-in key management
- High performance



Transparent Data Encryption

Oracle Advanced Security transparent data encryption (TDE) can be used to encrypt specific application data such as credit card numbers and social security numbers or entire application tables. TDE tablespace encryption provides an efficient solution for encrypting entire application tablespaces. TDE is completely transparent to existing applications, requiring no triggers, views or other application changes. TDE can be managed through Oracle Enterprise Manager.

Key Management

Oracle Advanced Security provides built-in key management, eliminating the complex key management issues associated with traditional encryption solutions.

RELATED PRODUCTS

- Oracle Database Vault
- Oracle Audit Vault
- Oracle Label Security
- Oracle Secure Backup
- Oracle Data Masking

The TDE master encryption key is part of a two tier key architecture that protects the encryption keys used to encrypt the data. The TDE master key can be stored in an Oracle Wallet or an external hardware security module (HSM). The Oracle Wallet is a PKCS#12 formatted file that must be opened using a password before the Oracle Database can start decrypting data. For centralized, network based storage of master keys, Oracle has certified TDE with numerous industry-leading HSM devices and communicates with these devices using the PKCS#11 interface.

Strong Protection For Data In Transit

Oracle Advanced Security provides an easy-to-deploy and comprehensive solution for protecting all communication to and from the Oracle Database, providing both native and SSL network encryption. SSL encryption and authentication are available for businesses that have deployed Public Key Infrastructure. The Oracle Database can be configured to reject or optionally allow connections from clients with encryption turned off. No changes to existing applications are required, allowing businesses to easily deploy network encryption.

Strong Authentication Replaces Password Based Authentication

Oracle Advanced Security provides strong authentication for users authenticating to the database using Kerberos, PKI or RADIUS. Oracle Advanced Security interoperates with the Microsoft Kerberos and MIT Kerberos v5.

Application Certification with Transparent Data Encryption

Oracle Advanced Security is certified for Oracle E-Business Suite, Oracle PeopleSoft, Oracle Siebel, Oracle JD Edwards Enterprise One and SAP.

Applications Certification	
TDE tablespace encryption (11.1.0.7 and later)	
Oracle E-Business Suite 11.5.10 and 12.0.4	Oracle PeopleSoft Enterprise 8.48
Oracle Siebel CRM 8.0	Oracle JD Edwards EnterpriseOne
TDE column encryption (10.2.0.4 and later, 11.1.0.7 and later)	
Oracle E-Business Suite 11.5.9	Oracle PeopleSoft Enterprise 8.46
Oracle Siebel CRM 7.7+	SAP 6.40 and 7.00

Contact Us

For more information about Oracle Advanced Security, please visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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