Oracle Database 10g Release 2

Oracle Database Vault

Frequently asked Questions

April 2006

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What is Database Vault?

Oracle Data Vault is a database security option that you use to protect application data from DBA access, enforce protection of database structures from unauthorized change, and set a variety of access controls to implement dynamic and flexible security requirements. These features help you to adhere to standards for separation of duties, regulatory compliance, and internal control. You configure Oracle Database Vault to manage the security for an individual Oracle database instance. You can use Oracle Database Vault on standalone Oracle Database installations and in Oracle Real Application Clusters (RAC) environments.

What's driving security requirements for IT organizations today?

There are two macro issues driving security requirements for IT organizations today: (1) how to protect against the "insider threat"—attack from within an organization by rogue individuals with privileges who are thought to be trustworthy, but prove otherwise and (2) the need to put in place controls to address the compliance requirements resulting from a deluge of privacy and corporate governance regulations. The latter include Sarbanes-Oxley, HIPAA, Gramm-Leach Bliley, the Japanese Privacy Act, BASEL II, and much more.

Can I use Oracle Database Vault to meet Sarbanes-Oxley requirements?

Oracle Database Vault is designed to help address technical security requirements found in various regulations, including Sarbanes-Oxley. Oracle Database Vault provides strong internal controls inside the database through separation of duty and preventing the DBA from viewing application data.

How does Database Vault help address customer compliance requirements?

Database Vault can be used by organizations as a preventive control. In other words, organizations can configure Database Vault to prevent users with super-privileges (DBAs) to access different types of data based on set of configurable parameters. By instituting a control in this manner, an organization can demonstrate compliance with specific regulations which require separation of duties among individuals accessing a system. Such is a common requirement across a number of regulations and is specifically called out in Section 404 of Sarbanes-Oxley. Additionally, Database Vault ships with a set of pre-defined reports that show who is accessing what data and under what conditions. These reports offer a means by which to demonstrate proof of compliance for organizations.

How does Database Vault address the "insider threat?"

Database Vault addresses the "insider threat" by placing additional restrictions on the data and applications users can access, particularly that by users with super-privileges (DBAs). These users, in particular, have long enjoyed unfettered access to any and all data residing on the database they manage. Database Vault places restrictions on what data these users can access by limiting which data or applications residing on the database can be accessed (via the concept of realms), or from additional parameters of when, how, and where it can be accessed (via the concepts of factors and rules).

What are internal controls?

Internal controls are mechanisms put in place to enforce business best practices. They are generally closely associated with addressing compliance requirements since organizations put in place controls to meet these requirements. Internal controls can be preventive, detective or corrective in nature. Preventive controls are designed to discourage or pre-empt errors or irregularities from occurring. They are generally thought to be more cost-effective than detective controls.

How does Oracle Database Vault enforce these security mechanisms?

Oracle Database Vault introduces two new concepts: (1) a *realm* which is a container which serves as a "protection zone" allowing the administrator to define the content making up the realm which he wishes users to have access to. This realm can be comprised of database objects such a single table or multiple tables, procedures, programs, an entire application, or multiple applications. (2) *command rules* which comprise of *factors* and *rules* and determine under what conditions a user can access a realm. Factors can be time of day, IP address, host name, or any number of identifiable attributes associated with the user.

Rules use Factors to put conditions for access. For example, a user will only be granted access to certain data if the command rules states access to the application is available during working hours, from an internal IP address, and/or any other number of configurable parameters. These restrictions can be applied to all system users, including the most powerful DBAs. Building rules with multiple factors, also allow for multi-factor authorization conditions to be set before a user is granted access to specific data. Customers can define rules that are based on specific compliance requirements or security requirements.

What else does Oracle Database Vault do?

In addition to that described above, Oracle Database Vault provides a web based management console that can be used to configure and manage the offering. Database Vault provides a dashboard to allow for monitoring of policies and configuration setup. Finally, Oracle Database Vault ships over three (3) dozen out-of-the box reports to show who has access to what helping to demonstrate proof of compliance.

Does Oracle Database Vault replace the security mechanisms in applications?

No. Oracle Database Vault is an additional layer of protection at the Database level that protects the application data by preventing direct access to the application tables by super-privileged users (DBAs).

Will Oracle Database Vault undergo a formal security evaluation?

Oracle is planning to have a future release of Oracle Database Vault evaluated under the Common Criteria security certification program.

What is the difference between the Oracle Database and Oracle Database Vault?

Oracle Database Vault is an option for the Oracle Database. Oracle Database Vault can be installed into Oracle Database 10g Release 2 (10.2.0.2) or higher. Oracle Database Vault installs additional security components and mechanisms (i.e. access controls) to prevent users with super-privileges (DBAs) from accessing data.

Is Oracle Database Vault the same as Oracle Audit Vault?

No. Oracle Audit Vault is a future product from Oracle currently under development and which focuses on securing and consolidating audit data. Oracle Database Vault and Oracle Audit Vault are intended to co-exist in the enterprise to assist customers with security, compliance, and privacy needs.

Are the Oracle Database Security Options included in Oracle Database Vault?

Both options (Oracle Label Security and Oracle Advanced Security) can be used with Oracle Database Vault, but are licensed separately. Oracle Label Security provides fine-grained, multi level access control by labeling data and users; while Oracle Advanced Security provides encryption of network traffic, strong authentication and media protection by column-level encryption of data stored on disk or backup tape.

How is Oracle Database Vault different from Virtual Private Database?

Virtual Private Database is a fine-grained solution within the Database that enables customers to build customized row level security solutions using PL/SQL. Oracle Database Vault provides a higher level solution that provides security for the database and application , leveraging VPD and other security features available with the Oracle Database 10g Enterprise Edition.

Do the existing Oracle Database Security Features co-exist with Oracle Database Vault?

Yes, some of the security features available with the Enterprise Edition are leveraged by Oracle Database Vault, for example VPD and Secure Application Roles.

Does Oracle Database Vault require a separate database?

Oracle Database Vault is an option to the Oracle Database 10g Enterprise Edition (10.2.0.2) and is installed on top of an existing database.

What Oracle software is required to run Oracle Database Vault?

Oracle Database Vault requires Oracle Database 10g Release 2 (10.2.0.2) or higher.

Will Oracle Database Vault be available for older versions of the database?

At this time there are no plans to make Oracle Database Vault available for releases prior to Oracle Database 10g Release 2 (10.2.0.2).

Does Oracle Database Vault require Oracle Real Application Clusters (RAC)?

No. You can use Oracle Database Vault on standalone Oracle Database installations and in Oracle Real Application Clusters (RAC) environments.

Does Oracle have partners signed up to support Oracle Database Vault?

Yes, Oracle has been working closely with the a number of partners in preparation for the release of Oracle Database Vault. These include global System Integrators (SIs) with risk management and security practices and Independent Software Vendors (ISVs) who wish to leverage Oracle Database Vault to better secure and help address compliance requirements with their solutions. Examples of these partners include BearingPoint and Protiviti as well as ArcSight, LogicalApps, Lumigent, Mantas, Tripwire, and Vormetric.

Is there training available?

Yes, Oracle Curriculum has developed a training class for Oracle Database Vault. A pilot version of the class is being offered in early May. Formal classes will be scheduled, please watch for announcements. In addition, Oracle By Example (OBE) exercises will be available on the Oracle Technology Network along with additional collateral.

When will Oracle Database Vault be generally available?

Oracle Database Vault will be generally available 30 days following its announcement (May, 2006).

Where do I go to learn more?

Visit //oracle.com/goto/databasevault for white papers, data sheets, and other materials or contact an Oracle representative near you-- http://www.oracle.com/corporate/contact/index.html.

April 2006
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