Oracle Data Safe

Keeping data in the cloud safe from theft or misuse is a top concern for every cloud service consumer. Oracle’s goal is to deliver cloud infrastructure and platform services for your business that include effective and manageable security, so you can run your mission-critical workloads and store your data with confidence. Oracle Data Safe is a key contributor to that confidence. Oracle Data Safe provides the features and capabilities necessary for you to manage the day-to-day security of the data you place in the cloud.

INTRODUCTION

Oracle Data Safe helps our Database as a Service consumers better manage the security of their databases. Whether you’re using the self-securing Oracle Autonomous Database, Exadata Cloud Service or a more basic database service, security in the cloud is a shared responsibility, with the customer responsible for their data loaded into the cloud and how their users access and use that data. Oracle Data Safe gives you the capability to manage your portion of that shared responsibility model with a single security console from which you can:

- Assess system configuration to identify areas of risk
- Examine database users to identify those who present the highest level of risk
- Examine user activity to identify inappropriate access to data or possible malicious activity
- Scan your databases for sensitive data, to determine what types exist within the database and how much of that data there is
- Remove risk from your non-production databases by replacing sensitive data with artificial or scrambled data via data masking
- Collect and analyze database audit information
- Generate alerts based on audit results
- Control the database audit settings

Key Features

- Discover and classify sensitive data
- Quantify the types and amounts of sensitive data contained within a system
- Remove risk from non-production data sets by masking sensitive data
- Automate collection and secure storage of database audit information
- Analyze database configuration to identify areas where security can be improved
- Identify high-risk database user accounts and enable easy inspection of those users’ activity within the database
- Over 125 built-in sensitive data formats, with an extensible library and easy addition of custom data types
- Simplify management of database audit settings
- RESTful APIs for rapid integration and automation
Oracle Data Safe helps you identify which of your databases in the cloud contain sensitive data, what types of data are in them, and how much sensitive data there is. Leveraging a pre-built library of over 125 different sensitive data types, Data Safe also gives you the flexibility to expand the default data model to include your own business-relevant sensitive data definitions. With just a few mouse clicks you are able to determine which of your databases pose the highest risk if breached, locate data that should be masked in non-production database copies, and identify data that may require a higher level of auditing and protection.

Key Business Benefits
- Move databases into the cloud with high confidence, improved visibility, and increased security
- Identify high risk configurations
- Validate system configurations to remove unnecessary risk
- Manage and store database audit data in a secure, centralized repository
- Report comprehensively on database activity
- Minimize sensitive data, including personal data
- Easily discover and audit high-risk database users

DISCOVER SENSITIVE DATA

Oracle Data Safe Main Console
MASK SENSITIVE DATA

Administrators often copy production Oracle Databases to create realistic non-production environments for development and testing. The problem is, each copy contains all the security risk inherent to that original production environment. Masking sensitive data removes the security risk by replacing the sensitive data with realistic-looking data suitable for testing, but without the related security risk of actual production data. Oracle Data Safe’s Data Masking capability flows naturally from sensitive data discovery – each of the more than 125 sensitive data formats has a predefined default masking format. That means that unless you need to customize the default masking options, you can completely mask a non-production copy of the database with just a few mouse clicks. Like sensitive data formats, the more than 50 data masking formats are extensible, so you can easily add your own data masking formats to the Data Safe library.

IDENTIFY AND MONITOR HIGH-RISK USERS

Users with elevated privileges, who may not have changed passwords in a while or who have password policies that are relatively weak are a common avenue for database compromise. Oracle Data Safe lets you examine your database users to identify which users present the highest risk, review the privileges granted to those users, and review the audit data that has been captured for those users.
CENTRALLY MANAGE AUDIT SETTINGS AND DATA
Oracle Data Safe makes it easy to control your database’s audit settings – with simple, easy to understand groupings of audit settings that can be applied using just a couple of mouse clicks. All of the power and complexity of the Oracle Database Unified Audit are still available, but Data Safe removes the complexity with audit policies that are usable by the vast majority of service consumers.

Data Safe also handles collection and secure storage of audit data from the target databases, with pre-created reports that allow easy analysis of the captured data. As mentioned earlier, audit collection is integrated with User Assessment, so you can quickly identify activity by any individual user.
SUMMARY

Oracle Data Safe is the one-stop service for managing your portion of the shared security model. Included with your Oracle Autonomous Database or Oracle Database Cloud Service, you can leverage the capabilities of Data Safe to identify, quantify, and manage risk in your cloud database environments. For more information, visit https://www.oracle.com/database/security.