Why do we need a ‘Database Vault’?

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What Security problems do we face today?

The most pressing security problems facing organizations today are:

- Protecting sensitive data against insider threats;
- Meeting regulatory compliance requirements; and
- Enforcing Separation of Duties.
Insider Threats

Although external exploits by criminals breaking into systems get big headlines, industry specialists estimate that 80% to 90% of the damage to information systems is done by insiders, which typically gets hushed up.
Meeting regulatory compliance requirements

- Protection of Personal Information Bill (POPI)
- Payment Card Industry Data Security Standard
- King III - King Report on Governance for South Africa 2009
- Sarbanes–Oxley Act of 2002 (for NYSE listed companies)

Other Laws:
- Health Information Portability and Accountability Act (HIPAA)
- UK Data Protection Act
- Family Educational Rights and Privacy Act (FERPA)
- California Breach Law
- Federal Information Security Management Act (FISMA)
Definitions:

• The main objective is to prevent a single person from defrauding the organization.

• A security principle that says no one person should be able to effect a breach of security.

• This principle prevents any part of the computer system from being under the control of a single person.
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What Auditors require

- Separation of Duties
- Reporting
- Notification
- Proven audit data integrity

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**Fundamental Data Security Requirements**

- **Confidentiality**
  Individuals see only what they are supposed to see

- **Integrity**
  The data is valid and trustworthy

- **Availability**
  Authorized users' data is available when required
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Components for Enforcing Security

• Authentication
• Authorization
• Access control
• Auditing
• Encryption
• Abuse of privilege
• Data or service theft
Principle of Least Privilege

Definitions:

• The principle of least privilege requires that a user be given no more privilege than necessary to perform a job.

• A process, user or a program must be able to access only such information and resources that are necessary for its legitimate purpose.
Oracle Database Vault

What is Oracle Database Vault?

Oracle Database Vault is a database security option that allows you to address the most pressing security problems facing organizations today, and that is:

• protecting sensitive data against insider threats;
• meeting regulatory compliance requirements; and
• enforcing Separation of Duties.
Oracle Database Vault

MyDBA Security Credentials

- Oracle Database 11g Security Options Certified Implementation Specialists.
- Database Vault implementation experience.
- MyDBA Lectures Oracle Identity Manager at Oracle University SA.
- MyDBA Lectures Oracle Access Manager at Oracle University SA.
- MyDBA Lectures Oracle Database 10GR2 Security at Oracle University SA.
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MyDBA Consulting Services

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