

Data and Applications Security

Developments and Directions

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Multilevel Secure Data Management

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Outline

- **What is an MLS/DBMS?**
- **Summary of Developments**
- **Challenges**
- **MLS/DBMS Designs and Prototypes**
- **Data Models and Functions**
- **Directions**

What is an MLS/DBMS?

- **Users are cleared at different security levels**
- **Data in the database is assigned different sensitivity levels--
multilevel database**
- **Users share the multilevel database**
- **MLS/DBMS is the software that ensures that users only
obtain information at or below their level**
- **In general, a user reads at or below his level and writes at his
level**