

REVIEW LESSON

MTA Course: Database Administration Fundamentals

Lesson name: Database Fundamentals 5.1

Topic: Understand database security concepts (One 50-minute class period)

File name: DBAdminFund_RL_5.1

Lesson Objective:

5.1: Understand database security concepts. *This objective may include but is not limited to:* understanding the need to secure a database, what objects can be secured, what objects should be secured, user accounts, and roles.

Preparation Details

Prerequisite student experiences and knowledge

An understanding of database security is required for this lesson. The primary focus of this review will be on understanding the need to secure a database, user accounts, and roles.

This MTA Certification Exam Review lesson is written for students who have learned about database administration. Students who do not have the prerequisite knowledge and experiences cited in the objective will find additional learning opportunities using resources such as those listed in the Microsoft® resources and Web links at the end of this review lesson.

Instructor preparation activities

None

Resources, software, and additional files needed for this lesson:

- Microsoft PowerPoint® viewer and projector
- DBAdminFund_PPT_5.1

Teaching Guide

Essential vocabulary:

security plan—identifies which users can do which action(s) to data in the database.

physical security—the safety of the actual location of the database.

access control—ensures and restricts who can connect to a database and what they can do.

user account—the means of access for people to the database.

role—Grants permissions to the database, multiple defined roles are utilized to create different levels of access to the database and provide different groups of users (with different database access needs) appropriate permissions. Roles help the DBAs to manage the user database access efficiently and expeditiously.

Lesson Sequence

Activating prior knowledge/lesson staging (5 minutes)

1. *Say:* The primary focus of this review is on applied use of database security. Today's class is about database management concepts.

Lesson activity (25 minutes)

1. Present the DBAdminFund_PPT_5.1 PowerPoint slideshow.

Assessment/lesson reflection (20 minutes)

1. There are questions for the class on the last slide of the presentation. These provide an opportunity for a class discussion. If you choose a formal assessment, you can turn this into a written quiz. The use of small student whiteboards works very well here as a lesson reflection tool.

Microsoft resources and Web links

Faculty Connection Academic Resource Center

(<http://www.microsoft.com/education/facultyconnection/ARC/ResourceCenter.aspx?c1=en-us&c2=0>)

MSDN Database Security

[http://msdn.microsoft.com/en-us/library/aa291801\(VS.71\).aspx](http://msdn.microsoft.com/en-us/library/aa291801(VS.71).aspx)