

Unit OS7: Security

7.4. Quiz

Windows Operating System Internals - by David A. Solomon and Mark E. Russinovich with Andreas Polze

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Security Ratings

Which of the following is not required for a C2 rating?

- a) Encrypted passwords
- b) Object reuse protection
- c) Secure logon
- d) Auditing

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C2 Security

C2 trusted path is provided by:

- a) Secure logon
- b) Directory-level discretionary access control
- c) Secure attention sequence
- d) Administrator protection of audit logs

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Security System Components

What is the heart of the object access protection in Windows?

- a) Local Security Authority
- b) Security Reference Monitor
- c) Active Directory
- d) Security Accounts Database

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Security System Components

The Windows security system consists of a number of kernel- and user-mode components. Which one is not among them?

- a) Transactional Object Monitor (TOM)
- b) Security Accounts Manager (SAM)
- c) Graphical Identification and Authentication (GINA)

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Security Settings

Changing the security settings for a file in Windows affects:

- a) The next open-operation on the file (CreateFile)
- b) The next write-operation on the file (WriteFile)
- c) The next read-operation on the file (ReadFile)

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Active Directory

The distributed authentication and authorization mechanism in Windows active directory relies on the following security protocol:

- a) Odin
- b) Zeus
- c) Kerberos

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Kerberos

Kerberos relies on:

- a) Symmetric encryption
- b) Asymmetric (public/private key) encryption
- c) Secret one way functions

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Access Check

Which of the following are not referred to for a security access check?

- a) Token
- b) Discretionary Access Control List (DACL)
- c) System Access Control List (SACL)
- d) Desired Access

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Security Token

Which of the following is not part of the Windows Security Token?

- a) Account SID
- b) Assigned Privileges
- c) Handle to Security Reference Monitor
- d) List of groups a user belongs to

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Access Control Entries

Which of the following is a valid access control entry (ACE) type?

- a) Allow and Deny
- b) Deny all
- c) Deny
- d) DACL

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Auditing

Auditing ACE's are stored in an object's:

- a) SACL
- b) DACL
- c) Token
- d) SID

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Impersonation

In client/server applications, impersonation is used to let a:

- a) Client take on a security identity of a server
- b) Client access same objects as the server
- c) Server take on a security identity of a client
- d) Server access objects on the client system

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Privileges

When a privilege is needed, the Security Reference Monitor checks this by:

- a) Querying the Local Security Authority process
- b) Checking privilege in the access token
- c) Checking privilege DACL for user access
- d) Writing auditing event to the Security event log

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Access Control Lists

If Alice is a member of the Manager's group and a file she wants to access has a DACL with three ACEs composed as follows, will Alice be able to read from the file?

1st ACE: Bob can't read from the file

2nd ACE: Manager's can't write the file

3rd ACE: Alice can write and delete the file

- a) yes
- b) no

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