

Unit OS6: Device Management

6.4. Quiz

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

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Windows System Calls

The primary Windows API function to read from a device is

- a) ReadDevice()
- b) ReadFile()
- c) DeviceQuery()
- d) DeviceReadData()

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I/O System Structuring

HAL is an acronym for:

- a) Hardware Analysis Level
- b) Host Adapter Layer
- c) Hardware Abstraction Layer
- d) Highly Abstracted Logic

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I/O Manager

The Windows I/O manager operates in:

- a) Kernel mode
- b) User mode
- c) Both

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I/O System Operation

The Windows I/O system operates:

- a) Always synchronously
- b) Always asynchronously
- c) Depending on the installed drivers

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Device Drivers

What kind of driver detects the presence of a hardware device in Windows?

- a) Bus driver
- b) Cab driver
- c) Plug-and-Play driver
- d) System driver

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Layered Drivers

Windows filter drivers

- a) Do not talk to hardware
- b) Can be installed dynamically
- c) May generate additional IRPs
- d) All of the above

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Performing I/O Operations

An I/O request is encapsulated in a:

- a) I/O command packet
- b) I/O directive
- c) Bus driver
- d) I/O request packet

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Driver Verifier

The driver verifier:

- a) Fixes buggy drivers
- b) Catches driver errors
- c) Prevents system crash after driver error
- d) Analyzes driver source code for errors

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Power Management

Which of the following is not a system power state:

- a) Standby
- b) Hibernate
- c) On
- d) Battery

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PnP Manager

When the PnP Manager encounters an unsigned driver it:

- a) Crashes the system
- b) Honors the system's driver signing policy
- c) Prompts the user
- d) Fails the installation

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